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Southern Agriculturist,

AND

REGISTER OF RURAL AFFAIRS;

ADAPTED TO THE

SOUTHERN SECTION OF THE UNITED STATES.

VOL XII.

FOR THE YEAR 1839.

BARTHOLOMEW R. CARROLL, EDITOR.

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THE

SOUTHERN AGRICULTURIST.

JANUARY, 1839.

PART I.

EDITORIAL AND ORIGINAL.

EDITORIAL ADDRESS.

The Southern Agriculturist has now completed its eleventh year, and the patronage it has met with, encourages the continuance of another volume. During the last year, the editor was prevented giving the work that personal attention, he desired. He however comes to his duties at the present time, with renewed hopes of success. His chief aim shall be to give to the Southern Agriculturist, a fresh interest—to awaken our planters to a sense of their true policy, and to attract to the science of agriculture that attention, so important a branch of our national wealth demands. To accomplish this, the editor looks for aid from his agricultural friends. He expects that they will furnish him with experiments they have tried, and the results of them, together with all such information as may advance the vocation in which they are engaged. With such auxiliaries, the Southern Agriculturist cannot fail of proving useful to our planters. No one of them is too wise to learn, and the knowledge of none of them is so confined as not to have in his possession much

matter, which if imparted, would greatly benefit the receiver. If each of our planters would present, through means of these pages, the amount of his agricultural improvements—if each one would make known those points upon which he desired information; how incalculable would be the advantages. To improve any science, it is only necessary to set its votaries to thinking and enquiring. This is all our agriculture wants to improve it. Awaken the spirit of inquiry among our planters—let them feel some curiosity to know, how the rest of the world is advancing in agriculture—let them see how such improvements are conducted—and a spirit of emulation and rivalry must be created, and out of it, auspicious results must spring.

Once more, therefore, we invite our planters to avail themselves of our pages, in disseminating and acquiring a correct knowledge of agriculture. A more propitious time than the present could not be presented. Our State is distracted by no political contests—but an awakened enterprise has infused its wholesome discipline into our people—new schemes of a vast and gigantic character are seizing their attention—while the extension of commercial relations, and the perfection of the sciences, and the improvement of the arts, invite to renewed and active exertion in behalf of agriculture. Our progress must be onward. If our planters pause, they will be overtaken in their career—the race will be lost to them, and others will pick up the golden fruits.

Proceedings of the Monticello Planters Society of Fairfield District, South-Carolina.

Monticello, Fairfield District, Nov. 6th, 1838.

Dear Sir:—Inclosed I forward you for publication the minutes of the second anniversary of the Monticello Planter's Society; and regret they could not with propriety have been more concise. In fulfilling the duties of my office, it is not my province to enlarge or curtail the records—whether they be local or otherwise in their character. The publication of these proceedings, however, I cannot presume will be at all objectionable to you; as I know you are not of that class, who proscribe every thing that bears the slightest impress of book-planting. Where men array ridicule and denunciation against facts and argument, it is not to be expected they will appreciate the desire of a planter to acquaint himself with Geology, Mechanics, Chemistry, Political Economy, Botany, or any branch of either Animal or Vegetable Physiology; and this is the amount of the doctrine preached by the opponents generally of recorded agricultural experiments and observations. In dissipating such vulgar prejudices, I wish you every success.

Being requested to make the inquiry, you will have the kindness to write me the terms upon which you would publish, say two hundred copies, of such a pamphlet as specified in the resolution introduced by Gen. Means.

Very respectfully,
Your ob't. servant,
B. F. DAVIS.

To B. R. CARROLL, Esq.
Editor So. Agriculturist.

Monticello Planters' Society.

The second Anniversary meeting of the Monticello Planter's Society was held at Monticello, the third of October; and a large concourse of persons attended to unite with the Society in the festivities of the occasion. The meeting being called to order, and new members proposed and received, the reports presented to the society at its last meeting were again offered for such disposi-

tion as might be deemed necessary; and it having been decided there was too little time afforded for an appropriate examination of these reports, they were laid on the table.

The Anniversary Orator, Gen. Means, was now requested to deliver the anniversary oration, which he did in a manner highly creditable to himself and the society.

On motion of B. F. Davis, it was unanimously

Resolved, That the thanks of the society be returned to Gen. Means, for the address delivered by him; and that the president at his leisure appoint a committee to request a copy of the same for publication.

On motion, the President appointed a committee to nominate officers to be elected for the ensuing year; whereupon the nomination was accepted, and the vote being taken, it appeared Chancellor Harper was elected President; James Alston, Vice President; B. F. Davis, Recording Secretary; John A. Smith, Corresponding Secretary; and John M. Robertson, Treasurer. Previous to the President-elect taking his seat, the former incumbent rose and delivered a valedictory, in which having spoken of the responsibilities devolved on the office and the common prejudices (existing without good reason) against book planting, he would regard himself as unworthy the trust that had been reposed in him, if he were to leave the chair, without acknowledging the great agricultural and social benefits so strongly characteristic of the unanimity and active exertion pervading the members of the association: he then returned his thanks to the society for the uniform courtesy and kindness extended him whilst acting as the presiding officer in their councils, and congratulated it on the results of the election just announced.

Chancellor Harper having entered on the duties of the office, the following resolution was introduced by Burrel B. Cook, Esq.

Resolved, That the committee on corn be instructed to investigate the nature and growth of Indian Corn, particularly as to its suckering; whether suckers are productive, and if so would it not be an improvement in corn culture to leave them on, as those of oats, wheat, &c.

As an amendment to this resolution, the following resolutions were proposed by Jonathan Davis: *Resolved*,

That the following experiments be made next year (1839) by the committee on corn, in ploughing for the production of this grain.

1. That three acres of rich bottom land, of equal quality, be measured off for corn; one acre of which, before planting, shall be broken up three inches deep, the second acre six inches, and the third acre nine inches deep; and each acre in the cultivation to be ploughed its original depth twice, and lightly ploughed the third time.

2. That three acres of upland well manured be laid off; one acre to be ploughed three inches, one five inches, and the third seven inches deep, and repeated in the like proportion intimated in the first clause of this resolution.

3. That reports be submitted of the separate products of each acre at the next anniversary of the society.

The resolution with the amendment being under discussion, Burrel B. Cook Esq. remarked that by accident or incident his attention had been drawn to the subject-matter of the original resolution in observing a single stock of corn break off from the stump, and bearing full ears like other corn in the field; that his custom was not to sucker corn; *and as a fact corroborating the propriety of such a practice*, exhibited a stock of corn with four suckers (all from one grain;) the main stock having two good ears, and each of the four suckers having one full ear: the only difference consisted in this, that the ears of the suckers were somewhat smaller than the ears from the main stock; he would also observe another point, not to be overlooked, was the additional quantity of fodder thus obtained. The corn of which he had shown a specimen had been planted (and to avoid misapprehension, by himself,) in the drill six feet by eighteen inches. The resolution, as amended, was adopted by the society and referred to the committee on corn.

Col. Jonathan Davis, with a few prefatory remarks, submitted the following resolutions which were also adopted and referred to the committee on cotton:

Resolved, That the following experiments be made in the culture of cotton;

1. That one row be planted in cotton seed, soaked in the red liquid from the stable yards; one row hard by the same in seed soaked in lime water, or ashes and wa-

ter; and one row in seed soaked or saturated in water alone: and the seed to be planted, to be rolled in rich earth.

2. That row by row be severally planted in the following ways: open the first bed with a narrow plough; the second bed with a hoe; the third bed with a plongh followed by a press fixed in rear of the plough to harden the earth, and taper the furrow to a point in the bottom; and the seed in every case to be thinly covered.

3. That the results in every instance under these resolutions, especially as relates to the best stand of cotton, be reported at the succeeding anniversary.

B. F. Davis suggested to the society that in the awards established the last year none had been assigned for mule sucklings; and he regarded it as impracticable and at variance with the constitution to award any premium of the kind at the present meeting. It was contended, on the other hand, that the premium had heretofore been given; and an adherence to the practice of the society, under the circumstances, would not be an infringement of the laws by which the society has been governed.

It was therefore moved, that the minutes of the last anniversary be so amended as to give the premium of a cup (value, $7.50,) for the best mule suckling. The motion was carried.

On motion, the following awards were established for the third anniversary of the society:

1. For the best Stallion, thorough bred, three years past, - - - - -	Cup,	$20.00
2. For the best Mule, thorough bred suckling,	"	10.00
3. For the best Filly, thorough bred, three years old past, - - - - - -	"	20.00
4. For the best Filly, thorough bred, suckling,	"	10.00
5. For the best common blooded Stallion, three years past, - - - - -	"	15.00
6. For the best common blooded Suckling,	"	7.50
7. For the best common blooded Mare, three years past, - - - - - -	"	15.00
8. For the best common blooded Mare suckling,	"	7.50
9. For the best Mule suckling, - -	"	7.50
10. For the best Bull, three years old, -	"	10.00
11. For the best Bull suckling, - -	"	5.00
12. For the best Heifer, three years old, -	"	10.00

13. For the best Heifer suckling, - - " 5.00
14. For the best Boar, three years old, - " 5.00
15. For the best Boar, six months old, - " 2.50
16. For the best Sow, three years old, - " 5.00
17. For the best Sow, six months old, - " 2.50
18. For the best Ram, one year old, - - " 5.00
19. For Member making the most Cotton on an acre of reclaimed upland, - - " 5.00
20. For Member making most Corn on an acre of ditto, - - - - - " 5.00
21. For " " " Wheat " " 2.50
22. For " " " Oats, " " 2.50
23. For " " " Rye, " " 2.50
24. For " " " Barley, " " 2.50
25. For member making best improvement in any Farming Utensil, - - - " 5.00
26. For two gallons finest Domestic Wine, " 5.00

The society took a recess of an hour to grant the respective judges full opportunity of deciding what members were entitled to the premiums receivable at the present exhibition; and upon re-assembling, they awarded as follows:

1. To Wm. J. Alston Esq., for the best common blooded suckling, a bay horse colt, by Roanoke.
2. To the Rev. Wm. Holmes, for the best common blooded Mare suckling, a b. c. by Roanoke.
3. To B. F. Davis, for the best Mule suckling, a black colt, by Berry's Jack.
4. To David Elkins Esq., for the best Bull suckling.
5. To David Elkins Esq., for the best Heifer, three years old.
6. To David Elkins Esq., for the best Heifer suckling.
7. To Major Nathan Cook, for making most Wheat on an acre of reclaimed upland.
8. To Major Nathan Cook, for making most Rye on an acre of reclaimed upland.
9. To Burrel B. Cook Esq., for two gallons finest Domestic Wine.

There were probably twenty colts exhibited, and generally of superior form and proportion; they were sired by the several stallions, namely, Roanoke, Bill Austin, Reform, Copperbottom, South America, and Hemlock.

The mule yearlings presented were only six in num-

ber,—the get of Berry's Jack, M'Meekin's Jack, and the Mammoth Jack; those by Berry's Jack having the advantage which a few months difference in point of age usually confers.

Major Cook, in consonance with a rule of the society, stated that his wheat lands had been well broken up; that the seed had been drilled, one peck to the acre, and the rows were one foot apart, and that he had used cotton seed manure, and as much as is ordinarily used in planting: the product was twelve-and-a-half bushels per acre.

Mr. Jno. Hutchinson sr., though debarred competing for the premium (seeing that it was confined to "reclaimed upland,") would inform the members that from seven-and-three-fourth acres he had gathered one hundred and forty bushels Wheat; he also stated his mode of culture.

Mr. Jno. M. Robertson had cultivated a half-acre of Barley; the yield of which had been ten-and-a-half bushels. The premium assigned being for the yield "of an acre," and Mr. Robertson wishing the question definitively settled, on motion of B. F. Davis, it was *Resolved*, That no member be allowed a premium, unless the exhibition conform strictly and literally to the requisitions of the society. The resolution being carried, Wm. K. Davis Esq., moved the following resolution which was also adopted;

Resolved, That the Treasurer be authorized to purchase the cups awarded as premiums at this meeting.

On motion of Gen. Means, it was then

Resolved, That the Treasurer be directed to have the minutes of each meeting, together with the reports ordered to be printed, published in pamphlet form for distribution amongst the members of the society. The resolution was carried.

The Society, on motion, now adjourned to meet again the first Wednesday in March next: but before the members and invited guests had separated, they partook of a rich and abundant feast provided for their entertainment.

B. F. DAVIS.

Anniversary of the Horticultural Society.

The following Reports of Committees were made at the last Anniversary meeting, and are now published at the request of the Society :

Report of the Standing Committee.

The Standing Committee beg leave respectfully to report their proceedings and awards for the year intervening between the second week in July, 1837, and that of July, 1838.

The pleasing duty assigned to them by the Society, embracing in its performance so many attractions, and associating such various sources of gratification, has been but imperfectly discharged. Few materials have been gathered to construct those garlands, which it is the peculiar province of this committee to prepare for the brows of at least the fair aspirants for the honors of this institution. Their delinquency demands apology, and they cheerfully render it to those whose bosoms glow with gentle emotions, and are the changeless abode of the tenderest sympathies.

The extensive fire which devastated so large a portion of our city, deprived this Society of its usual place of meeting—and as a consequence of this want, compelled the omission of the Spring exhibition. Your committee were thus deprived of the very favorable opportunity, which such exhibitions supply, of seeing and examining collectively, the very great variety of exotic and indigenous plants, which have been introduced within the past year. Such circumstances were calculated essentially to contract within the narrowest limits, the sources of information, and greatly abridge the materials of this report. Yonr committee at once perceived the necessity of extraordinary exertions on their part, to procure the information of which they were thus unexpectly deprived, and by visiting frequently the several gardens within this city, and its vicinity, repair as far as practicable the evil effects which were entailed by the lapsed exhibition. They had already individually commenced the performance of this duty, when an event transpired characterised

by all the circumstances of the most poignant distress, to whelm our city in one common sorrow; to draw back the public thought and feeling and action from the various channels of pleasure, of business and of politics, through which they were diffused, and concentrate them into one of general sympathy and mourning. Your committee need not state, that the event alluded to, and which produced so general and thrilling an interest, was the loss of the Pulaski, with so many of her passengers. The aged, the young, the lovely, the innocent and interesting, suddenly consigned to a common and awful destiny, under circumstances of doubt, uncertainty and suspicion, as they bore the causes of the awful and lamentable catastrophe. At such a juncture as this, it would have been alike indelicate and inconsistent with the public feeling—it would have jarred the general sensibility, had your committee sedulously prosecuted their inquiries, and consummated the objects of their appointment. In the mean time, the season was rapidly passing away, and the opportunities for such investigations escaping from them. Such in fine are the causes to which your committee would ascribe the paucity of their report, and on which they predicate their claims to favor, and indulgence for its numerous inaccuracies. With this plea, too, they are now ready for trial before that jury, the absence of whose smiles would prove their severest punishment.

In connexion with the first of the unfortunate events herein alluded to, your committee may be permitted to mention one singularly the victim of that calamity; to extend their remarks and express their sympathies for the very severe losses suffered by Mrs. Wittipen, (the late Mrs. Schriber.) She had for many years been most zealously and actively devoted to the collection and cultivation of the most rare and beautiful flowering plants—and had attained to a degree of skill in cultivating them, which promised to their enterprising and industrious proprietor, a commensurate reward, and to the public generally, the benefits of her successful acquisitions, in this department. On that fatal night, her whole establishment was destroyed, including her dwelling and green houses; and at least one thousand rare and beautiful exotic and indigenous plants, many of the former of which she had made considerable progress in climatizing. By

this event she has been greatly narrowed in her circumstances, as little or no part of her property was insured.

Mrs. Davis, whose name properly stands at the head of this report, as one of the earliest and most constant companions of Flora, continues to exhibit pleasing evidences of that care and observation so requisite to success in this engaging pursuit. Her general management, though unequally displayed, is nevertheless entitled to high commendation—the floral department is neat and well arranged, and many very fine plants engage the visiter's attention. The *Ranunculus* cultivated by this lady, and for which your committee advise the award of a silver medal, are the best produced this season, though inferior both in variety and beauty to others which have previously received this honorary testimonial of the Society's favor.

The variety of beautiful shrubs and plants which have so often previously attracted the favorable attention of this Society, in the garden of Mrs. Cochran, are in their present progressive and advanced state, still objects of increasing admiration. The *Thea Banksianæ*, and other roses, now display their charms on a magnificent scale—and the *Amaryllis* engage attention by their successful cultivation in the open ground. To this lady, your committee recommend the award of a silver medal, for the most beautiful display and successful cultivation of *Picotees.*

Your committee were particularly and very favorably impressed with the great skill and taste displayed by Mrs. Wagner, in the management and cultivation of her garden, and very large collection of green house plants. It is no disfavor to any other to state, that in the opinion of your committee, she is without a rival in these particulars. So general and minute appears to be her attentions to her whole establishment, that the same care is manifest in the least attractive, which exhibits itself in the most costly and interesting, and in the open grounds as in the green house. To this lady your committee cheerfully commend the award of the silver medal, for the best cultivated garden—and they can but express their regret that they have been deprived of the opportunity of such an inspection of her great variety of plants,

as to render the justice due to the objects of her successful and assiduous care.

Mrs. Ripley's garden is a cabinet of gems—the number of plants small, but selected with judgment and cultivated with great care and skill. She has succeeded in cultivating in the open ground, sheltering through the coldest months of winter, with a slight covering only, one of the finest *Freces'* (the *Freces elastica)* in this State.

The garden of Mrs. La Bruce, is clean and well kept, but from some defect of soil or casual inattention, the plants generally are not in a very flourishing state—nor has there been any novelties introduced and submitted to the notice of your committee, which lay claim to particular remark here.

The same general features obtained in the garden of Mrs. Johnson. She has the merit of having introduced to successful cultivation, the greatest variety of indigenous plants and trees, than either of her competitors—indeed, nearly the whole of such as are easily transferred from the forest to the hand of cultivation, may be found in her garden. The *Bignonia Grandiflora*, and other plants distinguished by honorary premiums, still flourish there, and are beautiful.

The large and fine garden of Col. Lucas, is well kept—his hedges and shrubbery give evidence of the incessant care and watchfulness with which they are attended. The number and variety of the *Camellia* successfully cultivated by this gentleman, so very far exceeds that of any other in this city or its vicinity, that your committee feel no hesitation in awarding him the premium for the greatest number and variety of the *Camellia Japonica.* For although a medal was presented to him the last year for the same object, yet are his annual additions such as fully to entitle him to it on the present occasion. Col. Lucas has the merit of first having introduced into this State the *Reticulata*—this is generally supposed not to be a variety merely, but a new order of the class of that beautiful shrub, the Camellia. But as Mr. Michel had the finest bloom, they advise that the latter should receive the medal. Your committee recommend that Col. Lucas receive the medal for the finest specimen and greatest variety of *Hyacinths.* One of the most attractive and extraordinary productions of this garden, is a *Camel-*

lia tree growing in the open ground (the single red)—it is without doubt the very largest in the United States—your committee are not informed of any other that bears a comparison to it. With a view to test the accuracy of this opinion, they herewith annex the dimensions.

	FT.	IN.
Largest diameter of the trunk at the surface of the ground,	1	
Circumference at do.	2	11½
Circumference 9 inches from the surface of the ground, where the branches commence,	2	9½
At 3 feet from the surface of the ground, it divides into 8 branches, 6 of which in the aggregate measure in circumference	5	6
The largest of these branches is 16 inches in circumference, and two others 15 inches each, the aggregate	3	10
The largest diameter of the tree, measuring to the extremities of the branches and leaves, is	16	5
The smallest diameter as above,	15	
The Circumference,	49	8
The Height,	16	10

The whole tree is of beautiful form, its branches numerous, and foliage dense and of a dark green—and is upon the whole in as vigorous and flourishing a condition as any other in the garden.

The garden of Samuel Patterson, Esq., exhibits a considerable display of taste and judgment. His grounds are small, though his plants are numerous and of the finest varieties. He has been very successful in the cultivation of the *Camellia*, of which there is an extensive variety—of the *Cactus*, of which he has several very fine and flourishing specimens—of *Roses*, remarkable for their novelty and beauty—and one of the most rare and beautiful varieties of the *Pynus Japonica*. Many other interesting and valuable plants are to be found in the garden of this gentleman.

Mr. John Michel, who in his zeal and devotion to this pursuit is without a competitor, continues annually, at a very great cost, to import largely, chiefly from the gardens of Paris, and to enrich our collection of exotics with the most rare and costly plants. Within the past year, he has very considerably augmented the collection of bulbs, by the newest and most costly additions. A few Herbaceous plants, and a great variety of *Roses*, and other shrubs, place him in advance of the gardens cultivated exclusively to gratify the taste of their proprietors.

Nor should they conceal from him the still more obvious fact, that his garden is not subjected to any system in its cultivation, but frequently exhibits to his visiters so much confusion, as occasionally to intimate neglect. Botany is itself a beautiful system of classes, orders, and species, and the obvious necessity it inculcates of regularity and precision, order and system, cannot be practically disregarded without being offensive. Your committee, in according to Mr. Michel the highest praise for his enterprise, have to regret that he has not furnished himself fully with preparatory means to carry safely through our winters, many of the tender tropical plants which are frequently added to his collection. Attention to this particular would render his services and skill publicly beneficial. Your committee commend the award to Mr. Wm. Michel, of silver medals, for the finest variety of *Roses*, the finest specimen of a *Rose*, and the finest and most beautiful flowering exotic, viz., the *Reticulata*.

A variety of lesser gardens, to which your committee have not been invited, they have been prompted to visit with views to the examination of very rare and beautiful plants. In the garden of Dr. Winthrop, they found a new and beautiful specimen of the *Mimosa*, indigenous to South America, of great beauty in its foliage, and singularity in its flowers. To Dr. Winthrop they award the premium of a silver medal for the re-production of the most rare and beautiful flowering exotic.

To Mr. Andrew Gray, your committee recommend that a silver medal be presented, for the finest collection of *Dahlias*; and to Mr. Strobel, a silver medal, for the most beautiful indigenous shrub, a *double Azalia*, taken from our own forests.

Your committee think it is due to Mr. Howard and to Mr. Guilleman, to remark that they have this season built each of them a green house, capable of containing an extensive number of plants, and which are filling up with a fine collection of rare and beautiful flowers and plants—in their nurseries also are to be found a large collection of the finest fruit trees, &c.

All which they respectfully submit for your consideration.

THOMAS BENNETT, *Chairman.*

Report of the Committee on Fruits and Vegetables.

Many very fine vegetables have been exposed for sale in our markets this season; mostly from the farms of Messrs. Edward Barnwell, J. Hartman, Wm. McLean, E. Witty, A. G. Rose, — Lapenne, James Fraser, R. K. Payne, J. S. Payne, P. Javain and J. F. O'Hear. Many others are no doubt worthy of commendation, whose farms the committee had not time to inspect. Even the most worthy, are sometimes diffident in inviting the attention of the Society, and thus appear to be overlooked.

Your committee witnessed a fine growth of *Guinea Squashes*, of a superior sort, and bearing well, at the garden of Mr. Lapenne, on the King-street Road.

Mr. Edward Barnwell exhibited at Mr. Baker's store, some remarkably fine *Cabbages*, six of them weighing sixty pounds, for which they recommend a premium.

The same gentleman also produced very fine *Cellery*, for which they likewise award the premium.

Mr. James Bancroft, Mr. John Michel, and Mr. John M. Van Rhyn, exhibited very superior *Globe Artichokes*. The medal is adjudged to Mr. Bancroft, for the best *Artichokes* seen this season.

To Dr. E. Horlbeck, they recommend the premium for the best *London Leeks*.

To Mr. Tobin, the premium for the best *White Onions* exhibited to the committee, (raised in the garden of Dr. Edward W. North) one of which measured 16 inches in circumference.

To Mr. Joseph A. Winthrop, is adjudged the premium for his superior *Sugar Beets*.

To Mr. Bancroft is awarded the premium for the best *Guinea Squashes*.

To Mr. Hartman is awarded a premium for a new sort of *Irish Potato*, called the Napoleon Potato, a mealy and productive variety.

Your committee have learnt that Mr. John Crawford raised in his garden, very fine *Onions*, perhaps superior to those raised at Dr. North's, but not having been exhibited, no other notice can be taken of them.

Mrs. Frederick Rutledge exhibited the greatest num-

ber of very fine *Cauliflowers*, for which the premium is awarded to her.

The Fruit also was unusually fine; and in many cases their comparative claims to the premium were so equally poised, that it was only possible to decide by weight, measurement and flavor.

To Mr. Charles Busacker,	is awarded	the premium	for Peaches.
" Mr. Henry Horlbeck,	"	"	for Nectarines.
" Mr. H. F. Sifley,	"	"	for Apricots.
" Mr. S. Magwood,	"	"	for Pears.
" Mr. Francis Michel,	"	"	for Portugal Quinces.
" do. also	"	"	for Perdrigaud Plums.
" Mr. Wm. McKean,	"	"	for Apples.
" Mr. Thomas F. Purse,	"	"	for imported Mulberries
" Mr. George Chisholm,	"	"	for Grapes.
" Mr. Edward Decotts,	"	"	for Figs.
" Mr. Jonathan Lucas,	"	"	for Musk Melons.
" Mr. Jos. A. Winthrop,	"	"	for Strawberries.

The *Peaches* of Messrs. B. Du Pre and A. Whitney and Wm. H. Wilson, were remarkably difficult to be distinguished. Mr. Gilfillin and others sent Peaches also of a different kind, but excellent in flavor. Messrs. John Michel, J. Parkinson, Fasbender, Jas. S. Johnson, and Dr. Bennett, exhibited *Grapes* of excellent flavor and growth.

Your committee regret that they cannot grant premiums proportionate to the relative qualities of this fine fruit, and with deference submit this their report.

By order of the Committee.

JOS. JOHNSON, Chairman.

Charleston, 11*th July*, 1838.

On the Distillation of Persimons.

The American Philosophical Society, as early as the year 1771, appointed the celebrated botanist, Isaac Bartram, to make a trial in the distillation of Persimon brandy. The result was as follows:

He procured a half bushel of the fruit in the month of December, which was much damaged by the frost and rain; so much so indeed, that he almost despaired of success: the proper time for gathering the fruit being October.

He caused the persimons to be well washed, and put in a five gallon keg, to which two gallons of water, and about two penny worth of yeast was added, in order to excite fermentation. This done, he committed the whole to the still, and drew therefrom near half a gallon of proof spirit of the most agreeable flavor.

I am no friend to intemperance, Mr. Editor, but from the above experiment it does appear to me important that the matter be attended to—since much advantage might be derived to those who have persimons growing about their plantations. The process of distillation is simple, and the following method might be practised with economy and success.

To those who would undertake the collection of large quantities of this fruit for distillation, I would recommend the following process:

Let a number of empty hogsheads, in proportion to the quantity of fruit be provided; take out one of the heads of each, and in the other let a hole be bored, at about four inches from the chimb, into which fix a plug, which may occasionally be taken out from the lower end, when the casks are fixed upon trussels, at a small distance from the ground. In these casks, over the holes, lay a number of small sticks, covered with straw, about two or three inches thick, to prevent the pulp from choaking them.

Your hogsheads being thus prepared, fill one of them half full with persimons, well mashed; add water until it arise within one third of the top; then cover the cask with the head that had been taken out, and let it stand about nine days. By this time the pulpy part of the fruit will be separated by the act of fermentation. You are then to draw off the liquor by the hole in the bottom of the hogshead and put it in a tight cask closely bunged up to prevent a second fermentation, whereby your liquor will become acid, and be rendered unfit for the still. Having thus extracted the more vinous parts from the first hogshead let as much water be added as before, which must be well stirred and mixed with the pulp—thereby to procure the whole strength of the fruit. A second hogshead is then to be charged half full of the fruit, well mashed as the first, and instead of pure water, fill it two thirds full, with the second extract of the first

ber of very fine *Cauliflowers*, for which the premium is awarded to her.

The Fruit also was unusually fine; and in many cases their comparative claims to the premium were so equally poised, that it was only possible to decide by weight, measurement and flavor.

To Mr. Charles Busacker,	is awarded	the premium	for Peaches.
" Mr. Henry Horlbeck,	"	"	for Nectarines.
" Mr. H. F. Sifley,	"	"	for Apricots.
" Mr. S. Magwood,	"	"	for Pears.
" Mr. Francis Michel,	"	"	for Portugal Quinces.
" do. also	"	"	for Perdrigaud Plums.
" Mr. Wm. McKean,	"	"	for Apples.
" Mr. Thomas F. Purse,	"	"	for imported Mulberries
" Mr. George Chisholm,	"	"	for Grapes.
" Mr. Edward Decotts,	"	"	for Figs.
" Mr. Jonathan Lucas,	"	"	for Musk Melons.
" Mr. Jos. A. Winthrop,	"	"	for Strawberries.

The *Peaches* of Messrs. B. Du Pre and A. Whitney and Wm. H. Wilson, were remarkably difficult to be distinguished. Mr. Gilfillin and others sent Peaches also of a different kind, but excellent in flavor. Messrs. John Michel, J. Parkinson, Fasbender, Jas. S. Johnson, and Dr. Bennett, exhibited *Grapes* of excellent flavor and growth.

Your committee regret that they cannot grant premiums proportionate to the relative qualities of this fine fruit, and with deference submit this their report.

By order of the Committee.

JOS. JOHNSON, Chairman.

Charleston, 11*th July*, 1838.

On the Distillation of Persimons.

The American Philosophical Society, as early as the year 1771, appointed the celebrated botanist, Isaac Bartram, to make a trial in the distillation of Persimon brandy. The result was as follows:

He procured a half bushel of the fruit in the month of December, which was much damaged by the frost and rain; so much so indeed, that he almost despaired of success: the proper time for gathering the fruit being October.

He caused the persimons to be well washed, and put in a five gallon keg, to which two gallons of water, and about two penny worth of yeast was added, in order to excite fermentation. This done, he committed the whole to the still, and drew therefrom near half a gallon of proof spirit of the most agreeable flavor.

I am no friend to intemperance, Mr. Editor, but from the above experiment it does appear to me important that the matter be attended to—since much advantage might be derived to those who have persimons growing about their plantations. The process of distillation is simple, and the following method might be practised with economy and success.

To those who would undertake the collection of large quantities of this fruit for distillation, I would recommend the following process:

Let a number of empty hogsheads, in proportion to the quantity of fruit be provided; take out one of the heads of each, and in the other let a hole be bored, at about four inches from the chimb, into which fix a plug, which may occasionally be taken out from the lower end, when the casks are fixed upon trussels, at a small distance from the ground. In these casks, over the holes, lay a number of small sticks, covered with straw, about two or three inches thick, to prevent the pulp from choaking them.

Your hogsheads being thus prepared, fill one of them half full with persimons, well mashed; add water until it arise within one third of the top; then cover the cask with the head that had been taken out, and let it stand about nine days. By this time the pulpy part of the fruit will be separated by the act of fermentation. You are then to draw off the liquor by the hole in the bottom of the hogshead and put it in a tight cask closely bunged up to prevent a second fermentation, whereby your liquor will become acid, and be rendered unfit for the still. Having thus extracted the more vinous parts from the first hogshead let as much water be added as before, which must be well stirred and mixed with the pulp—thereby to procure the whole strength of the fruit. A second hogshead is then to be charged half full of the fruit, well mashed as the first, and instead of pure water, fill it two thirds full, with the second extract of the first

hogshead; leaving it to ferment as before directed. This fermentation being perfected, draw off the liquor and let it be bunged up close. The third hogshead to be treated as the second, and in like manner every succeeding cask. After you have in this manner converted all your fruit into a fermented liquor, let it be kept at least one month before it is distilled, if it can be preserved without danger of its becoming sour, for it is to be observed that vinous spirits, drawn from new fermented liquors, are not equal in flavor to those which have been meliorated by age. The persimon tree is of a quick growth, and yields great quantities of fruit in a few years after it is planted. The wood is hard, has a fine close grain, and might be applied to many mechanical purposes. It burns well, and its ashes contains a very large proportion of salts. This tree grows spontaneously in almost every part of our State. They thrive best when planted in an open place—and for this reason our hedge would be excellent for the purpose. I would recommend them to be fixed at about ten feet apart round the fields, by which means they would be no incumbrance, but contribute to the support of the fences, as they would serve for line posts. The leaves soon rot, and become good manure—in so much that it is remarkable, that grass grows better under these trees than any other. Every farmer who has fifty acres of land, might plant three hundred trees round his fields, which being disposed of as before directed, would be a great addition to the beauty of his farm.

Let us suppose that each full grown tree will produce two bushels of fruit upon an average, (some I have seen bear twice that quantity.) From a farm then of fifty acres, six hnndred bushels of fruit may be gathered; and, as from the foregoing experiment, a bushel is found to yield a gallon of wholesome and very agreeable spirit, every farmer having that number of trees might make six hundred gallons of liquor as good as rum.

Hence it will appear, that the cultivation of the persimon tree is an object worthy the attention of our farmers; as it promises great profit to themselves, and a still greater advantage to the community in general.

BARNWELL.

Large amount of Soap produced from Myrtle Wax.

Mr. Editor,—Many of your readers may not be aware of the great quantity of soap which can be produced from a small quantity of myrtle wax. I have repeatedly made the experiment in my own family, and in hopes of being useful, I send you the following account, taken many years since, and which has been found correct up to the present time.

To three bushels and a half of common wood ashes, was added half a bushel of unslacked lime. These being well mixed together, were put into a cask capable of containing sixty gallons, and was filled up with water. In forty-eight hours the lye was strong enough to float an egg. It was then drawn off, and from six to eight gallons of it put into a copper kettle capable of containing about twenty-five gallons. To this was added only *four pounds* of myrtle wax. This was kept boiling over a constant steady fire from 9 o'clock in the morning till three in the afternoon. For the first three or four hours, a supply of strong lye was poured in occasionally, and the whole frequently well stirred with a ladle. After six hours boiling, two quarts of common large grain salt were thrown into the kettle, which was left one hour more to simmer over a slow fire. The liquor was then put into tubs to cool, where it continued twenty-four hours; and then the soap was taken out, wiped clean, and put to dry. The next day it was weighed, when the produce was found to be *forty-nine pounds* of good solid soap, from the materials, and by the process above mentioned. At the end of six weeks, the soap had lost only a few pounds, from the evaporation of its watery particles.

In many parts of our State the myrtle tree is abundant, and from three pecks to a bushel may be gathered from a hand per day. Would it not be worth the while of our planters to attend to this matter, I am sure it would save them many a dollar.

Your obedient servant,

ECONOMY.

St. Paul's Parish.

Oats.

Mr. Editor,—As the season is at hand when most planters begin to plant this grain, suffer me to make a few suggestions upon its cultivation.

It is almost the general practice among our low country planters to plant this grain with the hoe in drills. For a long while I thought that method the best, as it gave the oats more air when growing—and I am still convinced that if the time and expense are not considered, it is the best method. But then when we reflect that oats, planted this way, require a great deal of preparation of the land, and one or two after-hoeings, I am persuaded my mode will be adopted.

In travelling through Barnwell two years since, I observed they planted all their small grain broad cast. The crops looked well, and I learned from the planters they turned out well. Their mode of planting was this:

As early in the winter as possible, they break up the land with the plough, by ploughing all around the field. In this condition the land is left until February. The grain is then thrown broad cast, about three pecks to the acre, over the field. Immediately after which, the shovel plough follows, and gives the seed a deep covering. By the early part of March, the grain is fairly up, and by its shade kills all grass that may show itself. No after work is required; the grain grows well, and in my opinion produees very nearly as well as where the drilling process is used. By covering the seed as deep as I mention, you need not have it minded. Birds will pluck out a few grains, but will soon desist, as they will get their bills more filled with dirt than is pleasant to them. Let our planters try this method, and rely for once on the advice of one who would not give advice which he had not followed successfully himself.

ARATOR.

St. Andrew's Parish.

Baden Corn.

The great productiveness of this corn has now been established beyond controversy. Every one who has tried it, under every circumstance, has pronounced it the best yielding corn which can be planted. This has been the result both North and South.

During the past season, a friend of ours gave us a few seed, which planted us a quarter of an acre. The seed being scarce, we had to plant it, seven by five feet apart, and between hills, wherein Irish potatoes were growing. The corn was planted in April, and as the potatoes were dug in, the earth taken from them were hauled up to the corn. From the quarter acre thus attended, we gathered ten bushels and one quart of good corn. When the corn was in mutton, it experienced a heavy gale, which destroyed at least one bushel of it. The crop was badly attended in every particular. Had the seed been more closely planted, and the crop carefully and properly attended, we feel little hesitation in believing that the yield would have been double.

Along side of the same corn, on the same land, under the same culture, our common flint corn was planted; and from one acre not over twelve bushels were gathered.

The Baden corn is celebrated for its numerous production of ears, which, though not remarkable for their size, will, when shelled and measured, produce to the size of the ear, a larger quantity of grain than any other species we have tried.

In the presence of several gentlemen this fall, we selected several ears of our common flint corn, and several of the Baden. The ears of the flint averaged in length eighteen inches—the Baden only ten. Yet, in every instance, the Baden corn, when shelled, out measured the other. The difference was in the cobs. The cob of one being unusually large; that of the other very small.

The Baden corn makes a good homony, keeps well, and yields blades in abundance. The following letters on the subject will fully corroborate what we have above stated in favor of this valuable corn.

Extract from a letter of a gentleman in the State of Ohio.

"I think my Baden corn (the product of eleven grains planted the year before) has exceeded the productions of all your correspondents so far as I have seen any account. I have no hesitation in pronouncing it, at least 100 pr. ct. better as a general planting crop, than any other species of corn that we have in the barrens. I divided the product of these eleven grains into four parcels, which was enough to plant four acres. The best parcel, I put upon about three fourths of an acre remote from any other corn —the ground was the ordinary post oak barrens, and had been partially manured—I had it ploughed twice, harrowed, and laid off four by five feet, I dropped one grain in each hill to about half, and two grains in the remainder of the ground. It came up finely. I plucked off the suckers from two rows and suffered the remainder to take its course; it sent out generally strong shoots, frequently equalling in size the main stalk, and numbering from two to seven—each in most cases producing corn. It grew remarkably thrifty, assuming a deep rich green with an abundance of fodder, and the stalk attaining in some instances, an elevation of 13 and 14 feet. It promised, when in the silk, a remarkable result. In one hill (the production of two grains) there were nine stalks bearing twenty one ears of corn. These were counted by myself, and two of my neighbors who came expressly to see it, and who judged that such corn would yield one hundred and twenty bushels to the acre. Unfortunately for the experiment, about the time the corn began to harden, a heavy N. W. gale, with some hail, swept over and prostrated at least one third of it; yet from the three fouths of an acre I gathered 80 bushels. This corn was ploughed twice, run through once by the cultivator and received one hoeing. Two other acres were planted in other parts of my corn field and received the usual cultivation of my crop. The last acre was planted with the most inferior corn, being the tip end and nubbin corn, with my new ground corn, and yielded beyond my highest expectations. I did not measure it, but I am convinced that each acre produced double the quantity of my ordinary crop.

I am so well satisfied with the superior prolific qualities of the Baden corn, that I shall plant my principal crop with it next year."

Great Product of Baden Corn.

From the Ohio Herald and Gazette.

Mr. Harris:—I am induced to send you an account of the product per acre of the Baden corn, of which you noticed some time since a specimen stalk at my store. That was grown by Sheriff Henderson, and ripened to perfection. Mr. Erwin of Euclid, raised the Baden Corn no two and a quarter rods of new cleared land in the corner of the field, and the product was at the rate of 218 bushels per acre of shelled corn. He manured the land broadcast, and planted three in a hill, three and a half feet apart every way. Mr. Crosby of Euclid, also has raised about the same quantity, and with the like success. Now, sir, it clearly proves that if farmers will fix their lands properly, and not sparingly use manure, they can raise as much upon one acre as is usually raised upon four. Taking into consideration the badness of the season for corn-planting in this year, and the fact that it has ripened here for two years past, it may now be considered acclimated, and ought to be sought after by our farmers as the greatest acquisition for their benefit. It rarely produces less than three ears on a stalk, and goes up to ten and twelve ears, and it grows from twelve to fifteen feet high. The best way to plant is in drills, from twelve the to fifteen inches apart, and five feet between rows.

Here is an undisputable proof of what Mr. Baden has accomplished by steady perseverance for twenty years in the cause of agriculture, and his name will be handed down to posterity as a brilliant example of what may and can be done in improving the quantity and quality of the products of the soil for the sustenance of man and beast. Many complain that they cannot get sufficient manure for all their corn land. Then, I say, curtail the space allotted, and what you do plant, do it effectually and hoe in season, and increase your cultivation of roots, as ruta baga, turnips, sugar beet, &c. The careful feeding of these in a barn yard, where you ought to draw all

your disposable rubbish and fodder from the land, that can be converted into manure, will the following season furnish a vastly increased quantity of food for the corn and other crops. It is hoped for the benefit of farmers, the advantage of the Baden Corn may be made public, and that papers friendly to agriculture will give the above an insertion. Yours respectfully,

JAMES HOUGHEON.

CLEVELAND CITY SEED STORE,
December 17th, 1838.

PART II.

SELECTIONS.

On the Value of Marls and Calcareous Deposits.

[FROM THE COLUMBIA TELESCOPE.]

Mr. Johnston,—By my special request, Dr. Ellet, the able professor of Chemistry of the South Carolina College, has furnished the accompanying answer, upon a subject inseparably connected with the interest and prosperity of this State generally, but pariicularly the agricultural portion. Will you have the goodness, sir, to give it publicity.

Very respectfully.
JOHN DOUGLASS.

So. Ca. College, Dec. 19th, 1838.

Dear Sir,—I cheerfully comply with your request that I would communicate a simple method of determining the nature and relative value of marls and calcareous deposites generally, for agricultural and other purposes.

During the present session of the Legislature, opportunity has been afforded me of examining many such specimens from very different parts of the State, and I have no hesitation in saying that their value in agriculture renders them of more importance to its welfare, than almost any other mineral treasure which could be discovered. Not a few of them, too, are susceptible of easy conversion into lime of good quality, for agricultural purposes.

There is too little uniformity in the external characters of these marls to enable us to detect them. They vary much in color, passing from almost pure white to different shades of grey, yellow and brown—occasionally they consist to a greater or less extent of shells or their fragments cemented by foreign matter, but more frequently they exhibit no appearance of organic origin.

The simplest mode of determining the nature of such a substance, is to drop a fragment of it into a small quantity of dilute nitric or muriatic acid, when a rapid effervesence takes place, and continues until the mass is either entirely dissolved or the undissolved portion remains as a fine powder. This effervesence is due to the escape of carbonic acid from the carbonate of lime, which is the valuable constituent of

the marl, and its amount and violence will serve for a rough estimate of the quantity of that substance present.

But a much closer approach to accuracy is easily attainable, and requires no means which are not likely to be found in every planter's house. All that is necessary is a little muriatic acid, which need not be pure—a good pair of medicine scales, and a very thin and light six ounce phial. To make the assay, a portion of the marl reduced to fragments about the size of a pea is to be thoroughly dried before the fire and one hundred grains accurately weighed out.

In the next place the phial containing about an ounce of muriatic acid and an equal weight of water, is to be placed in one of the scales and accurately counterpoised. To the counterpoise a weight of 100 grains is added. The phial of acid being now removed from the scale, the fragments of marl are to be added to it at intervals until the whole has been introduced. To prevent small portions of the liquid from being thrown out of the vessel during the effervesence, it should be inclined at an angle of about 45 degrees.—When the effervesence has entirely ceased, the gas above the liquid is to be removed by gently blowing into it two or three times with a bellows, and the bottle and its contents are to be returned to the scales. A loss of weight due to the carbonic acid which has escaped in a gaseous form, will be observed. Its amount is determined by the weight necessary to restore the equilibrium, and from it the quantity of carbonate of lime in the hundred parts is easily calculated by the following rule: Multiply the loss of weight by 100 and divide by 44. The quotient is the answer.

The whole process, which is of very easy performance, and occupies not more than fifteen minutes, will give a result sufficiently true for all practical purposes.

Very respectfully,
Your obd't. serv't.
W. H. ELLET.

Sandy Soils.

[From Sir John Sinclair's Code of Agriculture.]

A soil that consists entirely of small grains of a hard nature, (silex) which neither co-here together, nor are softened by water, nor soluble in acids, though it ought not to be totally abandoned, yet is too poor to be cultivated with advantage. It would indeed be hazardous in the extreme, from the risk of having the covering mould blown off the new-sown grain, in the spring, by high winds. Sandy soils, however, generally have a considerable mixture of other substances, by which their quality is greatly ameliorated.

The best mode of improving the texture of such a soil, deficient in retentive or adhesive properties, is, by a mixture of clay, marl, seaooze, sea-shells, peat, or vegetable earth; and it frequently happens, that under the sand itself, or in its immediate neighborhood, the very materials may be found, so essential for its improvement.

In some parts of Norfolk, they have availed themselves of these auxiliaries, for improving a sandy soil, in an eminent degree; and by the continuation of judicious management, they have given a degree of fame to the husbandry of that district, far surpassing that of others naturally more fertile.

The improvement of a sandy soil, is generally accomplished by fossil manures; but vegetable substances are likewise effectual. A top dressing of peat has been tried for that purpose, and the experiment was attended, not only with immediate good effects, but with permanent benefit.

Rich sandy soils, under a regular course of husbandry, are invaluable. They are cultivated at a moderate expense; and at all seasons, have a dry soundness, accompanied by moisture, which secures excellent crops even in the dryest summers.

The crops raised on sandy soils are numerous, as the common turnip,—potatoes,—carrots,—barley,—rye,—buckwheat,—peas,—clover, —sanfoin, and other grasses. This species of soil, in general, has not strength enough for the production of the Sweedish turnip, beans, wheat, flax or hemp, in any degree of perfection, without much improvement in its texture, the addition of great quantities of enriching manure and the most skilful management.

When under a course of cultivation, it is a great advantage to sandy soils, either to fold sheep upon them, or to consume the crops of turnips upon the ground where they were raised. These practices greatly contribute to the improvement of such soils, not only by the dung and urine thus deposited, but by the consolidation and firmness of texture which the treading of the sheep occasions.

The carrot husbandry, in the "Sandlings" of Suffolk, as they are called, is one of the most interesting objects to be met with in British agriculture. After defraying all expenses, the clear profit, by feeding horses in the stables, is considerable, (*5l.* 9*s.* 6*d.* per statute acre.) Some prefer to fatten bullocks with them; while others, who have the advantage of water-carriage, think it most beneficial to send their carrots to the London market. Carrots are likewise an admirable preparation for other crops.

In Norfolk and Suffolk, it is found that poor sandy soils, not worth 5*s.* per acre for any other purpose, under sainfoin, will produce, after the first year, about two tons per acre, of excellent hay, for several years, with an after-grass, extremely valuable for weaning and keeping lambs. How much more beneficial than any crops of grain that such soils usually yield.

In the neighborhood of Dunbar, in Scotland, there are some farms originally of a light sandy soil, which have been rendered uncommonly productive; but they are situated on the coast, and accommodated with immense quantities of sea-weed. For many years they were cultivated in the following course of severe cropping. 1. Turnips; 2. Drilled wheat; 3. Clover; 4. Drilled wheat. By cultivation, the soil has now become a species of light loam.

The management of sandy land, according to the system adopted by the celebrated Duckett, of Petersham and Esher, in Surry, has been strongly recommended by an eminent author. It was founded on three principles; 1. Ploughing very deep: a due degree of moisture was thus preserved in his light land, by means of which his crops were flourishing in seasons of drouth which destroyed those of their neighbors; —2. Ploughing seldom, but effectually, by a trench plough, or what is called a skim-coulter plough, with which he buried the weeds that grew on the surface; he has been known to put in seven crops with only four ploughings; and, 3. Occasionally raising a crop of turnips the same season, after a crop of wheat or of pulse.

In the Pays de Waes in Flanders, sand is likewise cultivated to great perfection. The soil of that district, which was originally a barren white sand, by a slow but sure process, has at last been converted into a most fertile loam. The surface, to the depth of three or four inches was at first alone cultivated, but the soil was gradually deepened, as it became progressively enriched, and now the ground, at the commencement of every rotation, is trenched by a *shovel:* the soil being very moist and at the depth of from fifteen to eighteen inches; the mixed surface is buried, and the fresh soil brought up, enriched by the manure washed down to it, during the seven preceeding years. It is then subjected to the following crops: 1. Potatoes; 2. Wheat manured, sown in November, and carrots in February, for a second crop in the same year; 3. Flax, manured, and sown with clover seed, for the next crop; 4. Clover; 5. Rye or wheat, with carrots; and 6. Buckwheat; at the end of which period the ground is again trenched.

The double crops raised in the sandy soils of Flanders, in the course of the same year are attended with much advantage. The Flemish farmers thus obtain a greater quantity of manure, than they could produce under any other system, by which they are enabled to extract so much produce from soils, originally sterile, and which would soon revert to their former state of barrennes, without the greatest industry, and the most unwearied attention.

It is a rule, in regard to sandy soils, never to pick off any small stones that may be found in them, as they contribute to prevent evaporation, and to preserve moisture. It is another rule, frequently to renovate the strength of such soils, by laying them down with grass-seeds, and pasturing them for a few years, as they are so apt to be exhausted by aration, if corn crops are too frequently repeated.

It may be added as a general rule, that the fertility of sandy, or silicious soils, is in proportion to the quantity of rain that falls, combined with the frequency of its recurrence. As a proof of this, in the rainy climate of Turin, the most prolific soil has from 77 to 80 per cent. of silicious earth, and from 9 to 14 of calcareous; whereas in the neighborhood of Paris, where there is much less rain, the silex is only in the proportion of from 26 to 50 per cent. in the most fertile parts.

The Proper Season to Cut Timber.

[FROM THE GENESEE FARMER.]

Mr. Tucker,—I will suggest a few thoughts and facts, which have come under my observation, concerning the proper season of the year in which our building and fencing timber should be cut for profit and durability. Our ideas are derived, many times, from the tradition of others; and I perceive that the same powerful *tradition* that I have received of my father and aged friends, is abroad in the world. i. e. that timber, in order to be lasting, should be cut in the month of February; and in fact, so particularly have I, and many others of my acquaintance been, that we have cut almost all our rail timber in that season of the year; and if we were under the necessity of cutting a little at any other time, we considered it a misfortune, and cut as little as possible, thinking that it would soon *rot.* But facts have proved to my

satisfaction the contrary. I came into this country early in the spring of 1810, and commenced on the farm on which I now live, the first of April following. On Monday we cut an opening on which to build our shanty. On Tuesday we cut poles and built us a shanty, and myself and two others took our provisions to said shanty the next day, and commenced chopping. We cut our rail timber as we found it when chopping, supposing however that it would not last long, but we could do no better. But to my great surprise, that timber has lasted beyond all calculation, being some of it sound yet; and in fact there were two poles taken from that shanty, (for we built another better one the same spring,) which happened to be saved and laid on the fence, about five inches in diameter, completely sound, yet one of them is a red elm, which lies on the fence to be seen now, and the other is a white ash, which I cut up into blocks and put under the corners of the fence when I moved it two or three years past. It cut as sound apparently as if it had not been more than four or five years since it was cut in the woods. It is twenty-eight years this present month since these *poles* were cut. Who can state and prove facts equal to these respecting timber that was cut in February? (You will remember that I published an account of the largest elder tree that has ever been given in the Farmer it being 16½ feet high, 16 feet 4 inches horizontally through the top and 2 feet 6 inches from the body, 4 feet 6 inches from the ground.) I have observed and am able to show, that those rails that I cut and split in February rot soon, while those that I have ventured to cut in the spring or summer, when the bark would peel off, have remained heavy and sound much longer—traditions to the contrary notwithstanding. I, therefore, think that timber will last much longer, cut when the sap runs freely, especially if the bark is stripped off, because in this case all of the sap runs out, while that which is cut when the sap does not run, retains all of the sap, which hastens its *destruction*. Further I think timber to be durable should by all means be cut when the bark will peel, and do not neglect to strip it off. Brother farmers, just try it, and then you will know for yourselves.

RUSSEL WEAVER.

Cambria, Niagara Co,. April 22, 1838.

Some Hints on the advantage of Winter Pruning of Fruit and Forest Trees. By Mr. THOMAS WILLOT, Boston.

[FROM THE HORTICULTURAL REGISTER.]

Mr. J. Breck,—Dear Sir,—Having proved the advantage of the remarks I am about to make on the winter pruning of fruit and forest trees, I submit them for insertion in your Magazine.

It is well known that little can be done in the Horticultural department, as relates to out doors culture in the winter season in the Northern States; and it is also the opinion of many persons that *hardy Fruit and Forest Trees* can be pruned with safety only in the spring; for my part, I see no reason why all kinds of hardy fruit and forest trees cannot be pruned in the middle of winter, every fine day; nor, do I ever recollect of seeing any trees injured by winter pruning, when it is judciously done; the only advantage I am acquainted with in

spring pruning, is, that the wounds heal sooner than in the winter, but on the other hand, it is necesary to apply a composition on the amputated part, to keep the sun from cracking, and the rain from decaying it; there may be, also, another *item* in favor of late spring pruning, namely; the small dead branches are more easily seen than in the winter.

I will now endeavor to point out the advantage of winter pruning. In the first case it places you in a forwardness for the spring work, ploughing, digging, and preparing the ground for spring cropping, which may be considered an important point, in a country like this, where the seasons come on with such rapid progress in vegetation.

The destroying of insects is also another important point in the culture and well being of fruit trees, which is effected by clearing and washing the outer bark, a process that I have reason to believe, can be done more effectually in the winter than in the spring. The bark of trees is the best winter quarters for insects in a dormant state, and to breed in, which, being exposed to the winter's severity, they eventually perish. I would recommend that great care be taken in scraping off the loose outer bark of fruit trees, so that the inner bark is not injured by the operation, as I am fully convinced, that many trees are often more injured in this respect, than by winter pruning.

In the operation care must be taken to remove all the loose outer bark, by scraping it from the tree so as aot to injure the inner bark. Any large amputations or wounds made, should be pared smooth with a sharp knife, to which the following wash may be applied, viz: equal parts of clay and cow dung, well mixed and composed together, and a moderate portion of potash added and should be made of such a consistence as to be applied with a *hair brush*; but, if the trees are very badly *infected with insects*, I would recommend the same composition, made into a thinner consistence, mixed with a quantity of the wash generally used for destroying the mildew on the grape vine, made of lime and sulphur, in the following proportions, viz: to eight gallons of the before named composition add one pint of wash, which, apply to the bark of the trees in a thin, regular manner with a *brush*, after the outer bark has been cleansed as before directed.

In closing the above article, I canot refrain from impressing upon the minds of those persons who have fruit and more especially *forest trees* to prune, the advantage to be obtained by winter pruning. I hope they will be induced to try the experiment, and trust the results which follow will be a satisfactory proof of the utility of the process.

Management of Plants and Flowers in Rooms. By Edward Sayers.

[FROM THE HORTICULTURAL REGISTER.]

The present season is perhaps the most precarious period in the management of choice green-house plants and flowers in rooms and small green-houses; as plants at this time are sheding their leaves and generally in a *dormant* state; therefore, they do not require either too much *heat* or *water*, which in many cases starts the growth of soft wooded plants in a feeble state, as the Geranium, Daphne and the like: on the contrary, if plants are kept too *dry*, which in many

cases happens in warm rooms, the leaves drop off, and contract a feeble habit, and the bark shrivels up on the young branches.

The best method and criterion is a medium, namely: the temperature should be if possible, regular from forty to fifty-five degrees; the soil about the plant should be keept moderately moist, too much water saturates the earth in pots and generally rots the roots; if plants are kept too dry, the roots contract and naturally become weak, and are incapable afterwards of extracting whatever nutriment may be applied in a free manner to nourish them. The best criterion to water plants is to give a little at a time, as the earth dries in the *pot;* such pots as are very moist and saturated, should be dried by working up the top of the pot with a fork, or other instrument. All dead and decaying leaves should be, at all times, taken from the plants as they appear: dead leaves often contain many insects, therefore, should be removed. The plants should also be often examined, and cleansed of any scaly or other insects that appear on the leaves, with a spunge and warm soap suds, made from soft soap. Every opportunity should be taken to admit air of a fine, mild day, and they should be so placed, if possible, as to have the sun in the forenoon and middle part of the day. A semicircular stage, with running castors, is the best, which can be moved, to any part of the room, at pleasure.

At this season of the year plants are much refreshed by adding a little fresh, rich, earth on the top of the pot.—*January.*

Silk Trade of the United States.

[FROM THE SILK CULTURIST.]

We are under renewed obligations to Mr. Nourse, of the Treasury Department, for the following statement of the silk trade of the United States for the last seventeen years. From the accompanying letter, it will be seen that it is not only explanatory of a statement furnished by him, and published before, but includes the amount of imports and exports for the ten preceding years. The attentive reader will also notice that the amount of imports for the year 1837, fell short of the previous year, $8,627,389, and the exports of 1837, exceeded those of 1836, $445,072, leaving an aggregate amount of $9,072,461 less to be consumed in the country. The cause of this falling off is doubtless attributable to the embarrased state of commercial business in this country, and its consequence will doubtless be a new impulse to the enterprize whose ultimate object is to supply the demands of the country with skill of domestic growth.

Washington, Sept. 7th, 1838.

F. G. Cromstock, Esq.,—Sir:—You received from me some months since, a statement of silks imported from 1831 to 1835 inclusive. It was formed from the custom house returns, as far as the several kinds were specifically exhibited; from further examination, however it appears that in some years, especially in 1834, considerable amount was returned under the head of "Articles not ennumerated." The enclosed is a correct statement, and exhibits the import and export of silks from 1831 to 1837 inclusive.

I am respectfully yours,

MICHAEL NOURSE.

Exhibit of the value of silks, imported and exported, from 1821 to 1837 *inclusive.*

	Silks.	
Year.	Imported.	Exported.
1821	$4,486,924	$1,057,243
1822	6,840,928	1,016,262
1823	6,718,444	1,512,449
1824	7,204,588	1,816,325
1825	10,299,743	2,590,381
1826	8,327,909	3,367,015
1827	6,712,015	1,871.276
1828	7,686,640	1,270,461
1829	7,192,698	956,925
1830	5,932,243	1,061,054
1831	11,117,946	1,186,129
1832	9,248,907	1,337,073
1833	9,498,366	1,332,872
1834	10,998,964	1,036,057
1835	16,677,547	758,900
1836	22,980,212	762,730
1837	14,352,823	1,207,802

T. L. SMITH, *Register.*

Treasury Department,
Resister's Office, Aug. 31, 1838.

Advice to Young Men.

[FROM THE GENESEE FARMER.]

Regular employment—Occupations—Advice of Sir Walter Scott—Excellence in Profession. By HON. A. L. HAYES.

Regular employment is the price of happiness; and the first step in general, after taking leave of our *alma mater*, is the adoption of a profession. No matter how bountifully Fortune may have showered her gifts, some settled occupation is essential to real enjoyment. Without this, the mind, like an idle sword, is corroded by its own rust. Who has ever known a perfectly indolent man, that was not a miserable man? There is in this country no class of men of fortune, whose only care in life is to kill time and squander money, and who, associating together, may keep each other in countenance, though they cannot purchase contentment.

"Vain, idle, delicate, in thoughtless ease,
Reserving woes for age, their prime they spend,
All wretched, hopeless, in their evil days,
With sorrow in the verge of life they tend.
Griev'd with the present, of the past ashamed,
They live and are despised; they die, nor more are nam'd."

The misery of such a condition was illustrated in the fate of the Frenchman, who, with rank and high connexions, ample fortune, youth, health, repute, and a "troop of friends," found life without employment so "weary, flat, stale, and unprofitable"—one dull, daily routine of rising, dressing, eating, drinking, sleeping—that he preferred death by his own hand. to its longer endurance. Something of the feeling which precipitated the fate of this wretched suicide, must have been experienced by every man who has had the misfortune to live in the world, without any thing in the world to do. I hold it therefore, to be of the last importance to adopt an occupation, though I have nothing to say with respect to a choice of a profession, except that it should be such, as one will probably be satisfied with after it is made.

Some difference will always exist in the degree of consideration which various occupations enjoy, owing to the unequal degrees of skill and intelligence required by them; but true ambition would rather impart honor to one's profession, than seek to derive respectability from it. Our country is fortunately exempt from those castes, which separate society elsewhere into distinct compartments, to each of which a peculiar occupation or pursuit is by law or custom assigned. Here all professions, trades and callings are open. The only limitation is imposed by mental or physical inability; and one striking and important benefit of the liberal education you have received is, that it has made you *freemen* in the most extensive sense; for, qualified by it as you are, to enter any profession,

"The world is *all* before you, where to choose."

A man of cultivated mind, and real virtue, can never have his lustre soiled by any honest vocation well pursued. It is, indeed far from being a disadvantage, to possess abilities superior to the requisitions of one's calling. By the proper exertion of these he is sure of rising to distinction in his pursuit, and of reaping all the benefit it may confer. A young painter having attracted Sir W. Scott's notice and protection, by some pictures he had produced in his apprenticeship, and was inclined, on the expiration of his indentures, to turn his back upon the humble profession to which he had been bred; but, waiting upon his eminent friend with a piece he had commissioned him to paint, received this salutary advice; that he should apply himself to the improvement of his profession, as a much more lucrative field of exertion, instead of struggling with the difficulties that he must be sure to meet, for want of sufficient patrimony, in following the higher walks of art. The individual to whom this counsel was given, having accordingly turned his talents to study the science of his profession, has produced a highly commended work on the laws of harmonious coloring; and, instead of being a third or second rate artist, trembling with nervous apprehension about the position in which a picture may be hung at an exhibition, as really affecting his prospects in life, is the master of a large establishment, giving employment to a great number of men.

A more illustrious example is furnished by the life of "Scotland's greatest man," himself. When he saw his literary pre-eminence endangered by the declining popularity of his poetical works, and especially by the appearance of Lord Byron as a rival, he, with that good sense in which he so much excelled, resolved to abandon the bright field of poesy, for the humbler region of romance. The consequence

was, that he became more popular in that career than he had ever been as a poet; and having distanced all competition, erected there the most noble monument of his fame.

I refrain from the attempt to lay down any rule for the choice of a profession, not only because it might be a presumptuous interference with determinations already adopted, or the wishes of friends which ought not to be disregarded, but because I deem it of less consequence what the choice may be, than that the choice should be made and pursued in the right spirit. Excellence in ones art or calling, is the first requirement of professional duty. The disposition to excel, may arise from a calculation of profit or a desire of accumulation; a motive which is honest, and if the object be personal independence is altogether laudable. It may arise from a desire of distinction or a love of glory, which is a sentiment that deserves our favor, for it has unquestionably been productive of the best and noblest actions recorded in history. It is commonly found in union with a generous enthusiasm, which will not rest satisfied with a mediocrity of exertion which keeps the mind always fresh, active, and vigorous, and exhibits the evidences of improvement to the latest period of life. It is reported of the celebrated Mr. Wirt, who possessed this fine spirit in an eminent degree, that some of his last professional efforts were superior to any of his previous performances; and that this was observable, not only in the substance of his addresses, but even in the finish and decoration of the style. I know not how others may be affected but to me nothing appears more admirable, than this progresive excellence in advanced age. It is a splendid triumph of mind over matter, and points unerringly to our immortal destination.

Every one should have constantly in view a standard of merit in his profession, and should stimulate his exertions to realize it in his own performances. Let such a standard be as perfect as it may—the beau ideal of professional excellence, for no axiom is more just than that all models should be perfect, though man remains imperfect, that in striving to reach what is *impossible*, he may attain to what is *uncommon*. Thus, by furnishing an example of superior skill and ability by useful improvements in the practice of his art, or by enlarging the boundaries of the science connected with it, he best discharges that debt which every man owes to his profession.

Chinese opinions and practices in Mulberry Culture.

[FROM THE FARMER'S REGISTER.]

[The few short extracts which follow, are from a Chinese work lately translated and published in England. In the enumeration and description of the various kinds of mulberry tree, it will be perceived that not one resembles the ***morus multicaulis***, commonly called the Chinese mulberry.—ED.]

Different kinds of mulberry trees.

1st. The small mulberry trees (dwarf trees) have long branches, called *niu-sang* (ladies' mulberry trees) and *i-sang*. [*Eul-ya* Dictionary.]

2d. The *yen-sang* or *chan-sang* is the wild mulberry tree, the mountain tree. [Same work.]

3d. The *iseu-sang* or seed mulberry tree; its fruit shoots out before its leaves. [Japanese Encyclopedia, book lxxxiv, fol. 1.]

4th. The mulberry tree called *khi-sang* (that is to say, chicken mulberries) have leaves veined with red; they are rather thick. The silk worms that are fed on them produce a thin cocoon, which furnishes little silk. [*Tchong-chou-chou.*]

5th. The white mulberry tree bears thick leaves, that are as large as any one's hand. The cocoons of the worms that are fed on them, enclose a strong and abundant silk. This leaf furnishes twice as much silk as that of the ordinary mulberry tree. [Ibidem.]

6th. The mulberry tree, of which the leaves are plaited, and covered with a yellow pellicle, is called *kin-sang*, or the gilded mulberry tree. All the silk worms cannot be fed on the leaves of this tree, of which the color foretells that the tree will soon dry and perish. [Ibid.]

There are some mulberry trees that do not produce fruit; they are vulgarly called *nan-sang* or male mulberry trees. [Jap. Ency.] The mulberry trees, of which the fruit prouts out before the leaves, necessarily bears very few leaves. [*Tchong-chou-chou.*]

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To sow mulberries, the fruit of the black mulberry tree of *Lou* must be taken. The yellow mulberry trees of the country of *Lou* cannot be preserved a long time. [*Thsi-min-yao-chou.*]

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The mulberry trees of the country of *Khing* (ancient name of the province of *Hou-kouang*) and of the country of *Lou*, may be planted in level plains. where the ground is limey and clayey, and also in light earth. If the ground touches a mountain or hill, that is hard and mixed with red veins, it is only suitable for the mulberry trees of the country of *Khing*. [*Nong-song yao-tchi.*]

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The different kinds of mulberry trees are very numerous, we cannot describe them all.

The best are those of the country of *Lou*, and of the country of *Khing*. The mulberry trees of *Khing* yield a great quantity of fruit, but those of *Lou* very little. Those of which the leaves are thin, pointed, and divided in lobes, are the trees of the country of *Khing*. They bear solid and hard leaves.

The mulberry trees of the country of *Lou* have round, thick, and juicy leaves.

The mulberry trees of which the branches and leaves are large and thick, are a species of those of *Lou*.

The mulberry trees of *Khing* have solid roots and full hearts; they last for a long time. Those are the kind to be planted.

The mulberry trees of *Lou* have less solid roots, and hearts not so full; they cannot last for any length of time, (dwarf mulberry trees.) Trees called *ti-sang* are formed from them, but the trees of *Khing* have neither as many branches, nor as many leaves as those of *Lou*. Branches of the mulberry tree of *Lou* may be grafted upon them; they then live for a long time, and yield an abundance of leaves.

If the mulberry trees of *Lou* be employed to obtain the species of tree called *ti-sang*, (dwarf trees) and if they be reproduced by twigs, they propagate without interruption, and last an infinite time.

The silkworms that were fed with the leaves of the mulberry trees of *Khing*, produce a firm and strong silk; it is fit to make *cho* and *locha*, (kinds of thick gauze and crape.)

The leaves of the mulberry trees of *Lou* agree with the worms that are large; those of the trees of *Khing* with the small worms. [*Nong-sang-thong-khioue.*]

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Propagation of mulberry trees.

The work entitled *Thsi-min-yao-chou*, describes the manner of obtaining the best seed of the black mulberry trees.

The two ends of the mulberry must be cut off with a pair of scissors, and only the middle part taken. The seed of the two extremities are comparatively smaller than the others, and if sown they produce little mulberry trees, called *khi-sang*, (chicken mulberry trees) and *hoa-sang*, (flowering mulberry trees.)

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The intermedial part of the mulberry has larger and harder seed. The trees that proceed from them have firmer and stronger branches, and they bear thick and nourishing leaves. [*Nong-sang-thong-khioue.*]

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The mulberry trees called *ti-sang* (dwarf trees) ought to be planted in a garden near a well. If grass springs up around the roots of the trees, the earth must be turned up with a spade. When it does not rain they must be watered. When the silkworms are hatched they ought to be watered three times a-day; the leaves will then grow very quickly.

Among the different kinds of mulberry trees there are some that sprout out early, others late. It is from among the mulberry trees which are in the leaf the earliest, that those are chosen, from which the trees called *ti-sang*, or dwarf mulberry trees, are formed. [*Nong-tching-tsioueu-chou.*]

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In the work entitled *Tchong-hoa-min*, it is read: There are two kinds of mulberry trees: one bears the fruit of which we sow the seed: it sprouts out in the first or second month, (February or March.)

The following is the manner the other kinds is multiplied:

A pliant branch is bent to the ground, and maintained in that position by a clod of clay. Each bud produces a branch. When this mulberry tree has attained the height of two or three feet, its roots are then formed. The mother branch to which it belongs is then cut, and it is transplanted in another place. It soon becomes a tree. [Same work.]

* * * * * *

Observation upon the choice of mulberry plants.

The mulberry with a wrinkled bark yields only small and thin leaves; those of which the bark is white, the joints long, and have large buds, are the leafy trees of *Chi*, (diospyros) they always bear large and thick leaves. The cocoons spun by worms fed on them are firm, and furnish a great deal of silk.

The tall white mulberries succeed well upon the declivity of hills, in the angle of a wall, or by the side of a hedge.

The mulberry trees of less height, with a black bark, should be planted in moist ground. [Same work.]

The mulberry trees with black bark, which produce no seed, when the leaves are not too thick, are good for the nourishment of newly hatched silkworms. [Same work.]

The trees of the country of *Wang-hai*, are multiplied in the same manner as those with the white bark. The tree called *thsè-teng-sang* (or mulberry tree with rose-like branches) grows high and strong.

The white mulberry tree, or the tree with white bark, yields very little seed, it is multiplied by layers. If a person has seed they can sow it, but it must be in the shade. Heavy well filled cocoons will be formed, which will produce twice as much silk as the ordinary ones. [Same work.]

* * * * * *

Manner of pruning large mulberry trees.

The branches must be thinned, and above all, pruned in time. It ought to be done in order that the branches may acquire strength and push early, and that the silkwors may not want leaves.

If the branches are cut off, those that remain will acquire strength and the leaves will become thicker and more nourishing. If this year they are pruned at the proper time, the long branches will become strong and vigorous; the leaves of the next year will shoot out early and they will be thick and glossy.

All the branches from the centre must be cut, so that a man may stand up and easily make use of the axe. The branches and leaves fall outside of the tree; that is much better, than to be obliged to remove all around the tree a heavy ladder. A man thus placed in the centre of the tree, can do as much work as two persons placed outside of the tree. Too many branches must not be allowed to grow, otherwise they cannot be cut without hard work; moreover, the leaves will be thin and destitute of taste.

Moreover, the art of properly pruning the mulberry trees, is one of the most important points for the raising of silkworms. Many persons do not know how to make beforehand the necessary preparations when the sessation of agricultural work gives them leisure. They only occupy themselves with the mulberry trees, when the season of tending the silkworms has overloaded them with trouble. In this manner they are over charged with double work, and often the silkworms want necessary nourishment. If, on the contrary, these mulberry trees have been pruned, according to the rules, so that the branches can be easily reached, and the leaves obtained with facility, the silkworms will not wait for their food, the leaves will come in proper time, and, morover. they will be thick and glossy.

The method used in the country of *Thsin* is called *lo-sang*. In the last month of the year, (January,) all the superfluous branches must be pruned away, and those that are left be much thinned; afterwards upon the branches that are preserved, four eyes must be left, and the others picked off. The next year the branches that were left will have become strong; the black twigs which have grown from the middle of the eyes will be three feet in length; the leaves will be twice thick as usual and will present a smooth and brilliant surface. During the raising of the silkworms, they can be gathered with the hand; the external branches only, that shoot forth, must be left. After having

grown luxuriantly, until the autumn, they will have obtained the length of eight or ten feet. In the last month of the year, (January,) they must be pruned, as before. After the expiration of several years if the branches that have ben left appear to overload the tree, they must be pruned at their base.

This method is followed in the country of *Lo-yang*, to the east of the Yellow river; but a different mode is adopted north of this river, in the province of *Chan-tong*.

When the mulberry tree, has attained the height of from five to seven feet from the period of its transplantation, the tops of the branches must be cut. As the branches of the centre have been removed, those that remain will grow in a horizontal direction, and extend outward. When the tree has become large and strong, a man can stand up in the centre.

When the tree has attained its *maximum* of strength andgrowth, the stalk and the branches must be cut in the center.

There are three kinds of branches that must of necessity be removed.

1st. The branches inclining towards the root;

2d. Those which bend inward, towards the trunk;

3d. Those which grow in pairs; one must be cut;

4th. Those growing in a good direction, but which are too thick and too bushy.

The last month of the year, (January,) is the most favorable for pruning: the month that follows is less so. In the last month of the year the sap is quiescent, and the cessation of labor in the country leaves much leisure to the cultivators. Those persons who prune in the spring, only do it in order to peel them easily, (to make paper,) but that causes the mulberry trees to loose a great quantity of sap.

Those persons who wish to make use of the bark of the mulberry tree can take the branches, cut in the last month (January,) and deposit them, with a southern exposure, in a hole covered up with earth. They must be taken out in the second month, (March,) and they then peel very easily. [*Nong-sse-pi-yong.*]

The Georgia Lumber Company.

[FROM THE GEORGIA JOURNAL.]

Among the various undeveloped resources of the State, there are none of more importance than the vast pine forests of its Southern and Southwestern section. A company established for the purpose of bringing this lumber of the forests into market, is now in active operation in Telfair couuty, at Lumber City, their place of business.

We take this occasion to congratulate the citizens of that county upon the highly gratifying prospect of business and the rapid improvements that the county is experiencing by the industry and enterprise of this Company. It is a source of gratification to us (and it should be to every citizen,) to announce that the supposed unproductive and almost neglected lands in the lower counties, are by the operations of capitalists thus engaged in the lumber trade, fast taking rank among the productive and wealthy counties of the State. There are no lands in any section of the State that bid more promisingly to reward and enrich the owner. When cleared of the lofty growth of

forest timber, experience has shewn, a great portion of them to be admirably adapted to the culture of cotton; producing as good crops with the same expense of toil and cultivation, as any other in what are considered more fertile sections.

The operations of this Company have established an important fact, heretofore overlooked, in regard to those lands; that is, the immense value of the pine timber. A market value for this timber, standing in the tree, has been fixed, and such is the rate that the owners of lands lying on the streams, may be amply compensated by the employment of their whole disposable force, in cutting, hauling and rafting this timber to market. The present price per thousand feet, netts to the owner, a much greater sum than both timber and land could a few years since command.

Several years since the Georgia Lumber Company made purchases of large tracts of the first quality of these pine lands in Telfair, Montgomery, Laurens, and Pulaski counties, lying on the little Ocmulgee river, and the large streams which empty into it. They now own upwards of three hundred and twenty thousand acres of these lands, perhaps the most valuable in those counties, having been selected in reference to the business of the Company. With this purchase, was included one of the largest and most powerful water powers in any of the Southern Atlantic States, situated on the little Ocmulgee river, about a mile from its mouth. At this point, the Company, within the last four years, have constructed large and expensive improvements, consisting of saw mills, grist mills, dwelling houses, shops, storehouses, wharfs, &c. and a dam across the river. The saw mills carry twenty four saws, capable of cutting about one hundred thousaud feet of lumber in twenty four hours, These improvements including steam boats and freight, have cost at least five hundred thousand dollars.

The demand for manufactured lumber is greater than can be supplied, as is clearly established by the numerous vessels at Darien, engaged in the trade. The price of lumber is high, and affords to the manufacturer perhaps a better profit than any other business in which the same amount of capital is invested. The future demand and price of lumber opens a prospect to this Company for a rich return of their enterprise and industry.

The grist mill carries two run of stone, and being the only one within a considerdble distance which is capable of running through the season, will command a large and profitable business. The demand for meal is only confined to the limits of transportation. The location of the Company, is about one hundred miles from Darien and Brunswick, by the line, about one hundred and fifty.

The steam boat belonging to the Company, is destined to tow boats loaded with lumber down the Aaltamaha river to Darien and Brunswick, where it will find sale and shipment for a foreign market, and tow back the freight which the business of the country may require. The back freight, we are informed, will pay for the expenses of transporting lumber down.

The property possessed by this Company and employed in their business, must be of great value, not less than two million of dollars, and will produce a revenue for the present year, of at least eight per cent. on that sum.

At present the affairs of the Company are under the direction and management of a gentleman of the first respectability and character, and upon whose integrity and capacity reliance can be had with entire confidence for a faithful discharge of all the duties to the Company.

Milledgeville, Jan. 1839.

Important Experiment in Planting Corn.

[FROM THE WATERTOWN (N. Y.) STANDARD.]

A few weeks since we published a communication from a correspondent, giving the results of an experiment in planting corn, by Hart Massey, Esq. of this village. Mr. Massey called upon us Saturday last to correct an important error in said communication, and invited us personally to examine said field, which we accordingly did, and now give the results of our observation.

Mr. Massey took of the seed corn with which he planted the field, a small quantity, and soaked it in a solution of sal nitre, commonly called salt-petre, and planted five rows with the seeds thus prepared. The remainder of the field, we believe was planted by the same individual. Now for the result. The five rows planted with corn prepared with saltpetre, will yield more than twenty five rows planted without the preparation. The five rows were untouched by the worms, while the remaiander of the field suffered severely by their depredations. We should judge that not one kernel saturated by saltpetre was touched, while almost every hill in the adjoining rows suffered severely. No one who will examine the field can doubt the efficacy of the preparation. He will be astonished at the striking difference between the five rows and the remainder of the field.

Here is a simple fact, which if seasonably and generally known would have saved many thousands of dollars to the farmers of this county alone in the article of corn. It is a fact, which should be universally known, and is, in all probability one of the greatest discoveries of modern times in the neglected science of agriculture. At all events, the experiment should be extensively tested, as the results are deemed certain, while the expense is comparatively nothing.

Mr. M. also stated the result of another experiment tried upon one of his apple trees last spring. It is a fine, thrifty, healthy tree, about 25 or 30 years old, but has never, in any one year, produced over about two bushels of apples; while in blossom last spring, he ascended the tree and sprinkled plaster freely on the blossoms, and the result is, that it will this season bear 20 bushels of apples. Now if the plaster will prevent blast, it is a discovery of great importance. Mr. M. was led to make the experiment by reading an account of trees adjoining a meadow where plaster had been sown at the time there was a light breeze in the direction of the orchard, the trees contiguous to the meadow bearing well, while the others produced no fruit.

A guide to Purchasers of Horses, with Directions for the Feeding, Equipment, Riding, &c. Compiled by P. YORK.

[Concluded from page 666, vol. xi.]

TRAVELLING.

Previous to beginning a long journey a horse should be got into good condition, he should be shod about a week before he sets ofl, and his feet be kept every other day stopped with tar ointment, which is made by boiling equal parts of tar and tallow together. In place of the usual plan of roughing a horses shoes for frosty roads—which by requiring the removal of the shoe, injures the feet in renailing them on—steel studs, screwed into the iron, and standing nearly half an inch out from it, have been adopted. About two hours before he is to begin his work, he should be fed and watered, and on the road but little hay should be allowed him, but a quantity of corn commessurate with his work. A peck of oats a day, with eight pounds of hay, will not be too much if he perform from sixteen to twenty miles daily. He should never be allowed to drink while warm; his rack and manger on entering a strange stable, should be well wiped, to remove any glanderous or other matter that may adhere to them. Care should be taken to keep him, when in the stable, in as equal a temperature as possible by appropriate clothing, and avoiding all draughts and damps: his feet, but not his legs, should be well washed wherever he rests, and after very *great* fatigue, swathed in flannel bandages, and at night should be well swathed in flannel bandages, and at night should be well stopped with fresh cow-dung. No better stuffing can be had to cool the hoofs than fog or moss soaked well with water; if in winter a little warm. It is clean and oomfortable to the animal, and easily remoistened by applying a wet sponge, or pouring a little water on the foot turned up. In addition to these hints, it will be well to divide his feeds into four portions, giving the largest in the morning and at night. The beginning and end of the stage should always be performed slowly, and if cool, give him water within the last three miles; for the horse derives more pleasure, and more real benefit from taking it then, than he does from swallowing half a pail of water after he gets into the stable, and standiug still after it; after drinking, walk him gently forward, and in this propitious state he will be ready for his corn in a quarter of an hour. After getting to the stable, let him be led into a clean and dry stall; let his legs be washed as high as the knee with soap and water; after this litter him up to the hocks with clean dry straw, loosen the saddle girths without removing the saddle, throw a dry warm rug over his loins, let his face, ears throat and neck be rubbed quite dry, then proceed, when the horse is eating a little sweet fresh hay, to bathe his legs with warm water, which is particularly cooling and refreshing to him, as it allays the excessive and painful tension about his muscles. After this, get his belly pretty well cleaned, remove the saddle and rub him gentty down, then put on his clothes, put his corn before him, and let him remain undisturbed till next morning.

When you stop to bait, be careful to have the inside of your saddle made perfectly dry; but if this cannot be effected, put a dry saddle cloth, for this is very grateful and refreshing to the animal; also at every stage be careful to examine the state of your horse's back, to guard against any warble or chafe.

In hot weather and hard roads, it is very comfortable to a horse to have his feet just cooled in any water that may lie in the way; for the friction on the iron shoe must render it nearly burning hot. But above all never allow him to drink when warm, or to stand for any considerable time with his feet in cold water; for foundering, in nine cases out of ten, is the inevitable consequence.

EXERCISE.

A gentleman or tradesman's horse suffers a great deal more from idleness than he does from work. A stable-fed horse should have two hours' exercise every day, if he is to be kept free from disease. Nothing of extraordinary or even ordinary labor can be effected on the road or in the field without sufficient and regular exercise. It is this alone which can give energy to the system, or develop the powers of any animal.

How then is this exercise to be given? As much as possible by, or under the superintendence of, the owner. That exercise given by the groom is rarely to be depended upon. It is inefficient, or it is extreme. It is in many cases both irregular and injurious. It is dependent on the caprice of him who is performing a task, and who will render that task subservient to his own pleasure or purposes. Such a horse as here described would be much healthier in a loose box about 16 feet square.

FEEDING.

This is a subject of great importance; for on the proper feeding of horses their health and usefulness greatly depend. Good hay is more relished by horses than any other dry food, and when given with moderation is more wholesome, but bad or indifferent hay, especially when a horse eats a great deal of it, is exceedingly injurious. Horses that work hard should be allowed a small portion of ground beans with each feed of oats. The daily allowance of hay for a saddle-horse should not exceed twelve pounds; many hunters are allowed only eight pounds, and are kept in the highest condition. Engligh cavalry horses are allowed 14 lbs. hay per deim, and 10 lbs. oats. Many physiologists, from the small size of the horse's stomach, recommend small feeds often repeated. When young horses are kept in the stable a great deal, with hay constantly before them, they will eat merely because they have nothing to do; and by being kept in this way for sometime, they in process of time, stretch their stomachs to double the natural size, and thereby increase the appetite both for food and water. When such horses are fed, if the oats are thrown all together in a heap in the manager, they grasp so eagerly at them, and take so many into their mouths at once, that they cannot masticate them all, but swallow a considerable portion of them unchewed. These being indigestible, pass through the bowels unchanged; many are seen whole in the dung. Horses should be fed three or four times a day. Early in the morning they should have a little hay and about a gallon of water:

having eaten this, they should be exercised for an hour or two, if they have no work to do; and when they return, the first feed of oats should be given. About twelve o'clock another portion of hay should be given, a small feed of oats, and another gallon of water: at six in the evening, a little walking exercise, and afterwards a feed of oats. A small quantity of water may be given while at exercise. At eight, the last portion of hay should be given, and a little water. If a horse be wanted for work the following day, another feed of oats may be allowed. When a horse has no work, and it is not convenient to give him sufficient exercise, a cold bran mash should be substituted for one of his feeds of oats. This is a good method of feeding a horse that has but moderate work, and that work uncertain. Travelling from ten to twenty miles a day, at five or six miles an hour, may be called moderate work. When a horse is ridden or driven faster than this, he should be kept without food for an hour or two before he is taken out; and when this has been omitted, he should be ridden slowly for the first three or four miles. A mixture of oats and barn, or ground oats and good fresh bran, made into a cold mash, is excellent food for a horse that has but little work to do; it prevents thirst, and is easy of digestion, and on this account is particularly useful for horses that are eager for water. The most important circumstances with respect to feeding, are to prevent young horses, when first taken into the stable, from acquiring an inordinate appetite, by giving no more food than is proper. When a horse whose habits are already formed is purchased, the groom will soon find out what they are; and if the animal has already acquired an immoderate appetite, it must be gradually corrected.

There is a prejudice in the minds of many people against the horse being fairly supplied with water. They think that it injures his wind and disables him for quick and hard work. If he is galloped, as he too often is, immediately after drinking, his wind may be irreparably injured but if he were oftener suffered to satiate his thirst at the intervals of rest, he would be happier and better. It is a fact unsuspected by those who have not carefully observed the horse, that if he has frequent access to water he will not drink so much in the course of the day, as another who, to cool his parched mouth, swallows as fast as he can, and knows not when to stop.

On a journey a horse should be liberally supplied with water. When he is a little cooled two or three quarts of water may be given to him, and after that his feed. Before he has finished his corn two or three quarts more may be offered. He will take no harm if this be repeated three or four times during a hot day.

It is a judicious rule with travellers, that when a horse begins to refuse his food, he should be pushed no farther that day. It may however, be worth while to try whether this may not proceed from thirst, as much as from exhaustion, for in many instances his appetite and his spirits will return soon after he has partaken of the refreshing drought. About 2 oz. of salt daily, is an excellent thing for a horse, just mixed with his oats or put into his mash on feeding him.

STABLE ECONOMY.

A stable is generally built with regard to the following considerations, a sound and clean approach, the proximity of good water, and freedom from nuisances and bad smells: in the interior it should be commodious and well lighted, (as the eyesight of horses kept in dark stable is liable to be injured by the glare of light, when they are brought into the open air;) the stalls should be large enough to admit of the horse turning himself easily round, they should slope gently towards the centre, to carry away the water, and the stall should have a grate in the middle, in order to keep the litter perfectly dry. Every stable of any extent should be provided with a loose box, into which a horse can be put in case of lameness, or after any hark work; for nothing tends so much to relieve the cramped sinews, and surbated feet of horses, as being permitted to stand loose. The utmost attention should be used in keeping the stable perfectly clean, and in the constant admission of fresh air,—chiefly during the absence of the cattle, for *warmth* is indispensable to keeping horses in *coat* and *condition*. For this purpose a pipe or tube connecting with the external air, and the key holes, are enough. Open windows are an abomination,—and "coolness," "circulation of air," &c., are stable terms of little,—or, if they have any—of mischievous meaning in the months of persons ignorant that a warm climate and temperature, are indispensable to the well being of the horse, originally native of an almost torrid region.

BRIEF EXPLANATION.

of the terms most used of describing Horses and their Diseases.

Action. The paces of a horse. These chiefly depend upon his natural powers and disposition, but may be greatly improved by judicious bitting and riding.

Arrèsts or Arrets. A term given by farriers to a scurfiness of the back part of the hind leg.

Backing. Mounting a colt or filly for the first time.

Bishoping. When artificial marks are made in the horse's teeth to give him the appearance of greater youth than he really possesses he is said to be bishoped, and the operation is termed *bishoping*, not in allusion to the venerable Bench of Bishops, but from the name of the man who was the first to practise the trick,

Botts. Short reddish-colored worms, often found attached to the horse's stomach.

Breaking down. An accident that often happens in racing, hunting and other violent exercises. It is caused by rupture either of the suspensory ligament of the perforans tendon, of the suspensory ligament of the fetlock joint, or of the ligament which sustains the two pastern bones in their situation.

Bridle Hand. The left is called the bridle hand, in contradistinction to the right, which is termed the whip hand.

Buck Eyes. A term used by dealers and jockeys for bad eyes.

Capped hock. A swelling on the point of the horse's hock, generally occasioned by blows in kicking.

Condition. This term is used to imply a horse's being in perfect health, or, as Mr. Taplin says, "fine in coat, firm in flesh, high in spirits, and fresh upon his legs."

Cradle. A sort of wooden necklace, made to hinder horses from biting their legs when sore.

Curb. A swelling on the back part of the hind leg, a few inches below the point of the hock, generally causing lameness.

Docking. Cutting off part of the tail.

Feather. A mark in the horses forehead or neck, made by the turn of the hair. It is considered ornamental, and, by some, as an indication of good qualities.

Feel. To feel a horse in the hand, is to observe that he obeys the directions given by the bridle and bears upon the bit.—To feel a horse upon his haunches, is to observe that he plies *them* and does not lean on the shoulders.

Feather Weight. Among sportsmen, or on "The Turf," as it is termed, this signifies the lightest weight that can be put upon the back of the horse, in whatever match he may be engaged.

Gaunt-bellied. A term applied to a horse when he is drawn up in the flank, or, as the French term it, *enflanqué.*

In hand. Keeping a complete command of the horse by both the reins and the pressure of the legs.

Hand. The division in the standard for measuring horses is thus named. A hand is four inches.

Nag. A name sometimes applied to road-horses in contradistinction to those that have long tails, or are used in harness.

Pace. The paces of the horse are the Walk, the Amble, the Trot, the Canter, and the Gallop.

Pattering. Walking with a mincing gait.

Romping. Throwing about the feet in the paces.

Scrambling. Using the leg from the knee as if catching at something.

Physic. In stable language, the term physic is applied to *purgative* medicine only.

Training. By the word *training* is meant putting a horse in that state in which all the functions of the body are carried on with vigor and the animal being in perfect health, and accustomed to regular exercise, is capable of going through as much fatigue as his natural constitution will admit of. This state is also called "Condition," training being more applicable to the race horse.

ONE WORD ON FARRIERY.

When a horse has met with a bruise or blow from any cause, or in short, a contusion of any sort whatever, hot water, long and constantly applied by means of cloths well saturated with it, is not only the best but safest application, and the earlier the better.

To a fresh clean cut apply tincture of myrrh and aloes.

We have done, and our purchaser may safely go to market, and keep his horse with some assurance that he "*knows what he is about.*"

Hoof-Ail.

[FROM THE GENESEE FARMER.]

Mr. Tucker,—Although there has been much said about the disease called hoof-ail, yet I think we have not arrived at the point where it will be no longer necessary to investigate the subject. It is a disease with which many of us have had some practical acquaintance for the year past; and if every person will take the trouble to inform the public whatever he has learned by observation respecting it, it may possibly be ascertained what is the cause of the disease, when the difficulty of effecting a cure will be partially removed at least.

Although I have learned but little respecting the cause, and less about the cure, I have concluded to communicate that little, hoping others will do the same, and the desired result be obtained.

The disease has been very prevalent in this vicinity the past winter, and the first object of my inquiry and observation, was to ascertain as far as possible whether the ergot produced by spear grass was the cause of it; and on examining the hay which was eaten by the cattle that were affected with the disease, I found in some instances a great quantity of ergot, and in others none at all, One man fed his cattle wholly on timothy, in which there was none of that substance, and another fed on clover in which there was none, and I was told that one man whose cattle were affected, fed wholy on straw.

The first instance of the disease which came within my observation, was a near neighbor, who had two calves which were lame; one of them, he thinks, was taken in December, and about the first of February, when the other was taken lame, I saw them; the one that was taken first was then quite lame, the hoofs on both hind feet were loosened from the skin at the top, and appeared on the point of coming off, and the other calf being so little affected, we concluded to try to cure it; and having heared of cutting into the back part of the ankle and taking out a small bladder of liquid, we opperated as nearly according to the directions published in the Genesee Farmer as we could, and took out the bladder on one foot, when we became convinced that it could do no good. It being sound below the skin, and that liquid appeared to be placed there for useful purposes, we let the other foot be without cutting, only we cut off the ends of the toes on both hind feet, and found the outside claws so much affected that they would not bleed, and the inside ones not affected at all; we put on spirits of turpentine then, and a few times afterwards, and the calf was put in a warm stable and soon recovered so as to be but a little lame, and I think will not lose even the hoofs which were affected; the one not cut seemed to do the best. I am confident cutting did no good, and I cannot determine whether spirits of turpentine was beneficial.

I have seen several cattle which were taken lame since the first of April, when the weather was not cold.—Whether their disease was the hoof-ail, I do not know. The skin was very much inflamed and swollen between the hoof and dew claws. I cut through the skin in one instance, and found the disease went no deeper, and we applied spirits of turpentine to that which we cut and to several others, and they all recovered soon. I am not certain that the cutting or dressing did any good. I believe the remedy prescribed by Mr. Palmer of

Cayuga county, (salt and water,) would be quite as likely to answer the purpose; it seemed to be an inflamation in the skin only. I have never known any cattle taken in that way and at that time, but soon recovered if they had nothing done for them.

Many of the cattle that I have seen, which were troubled with the disease, were kept in places which were so much sheltered from the wind and storm, and so much straw to lie on, that it seemed as though they need not freeze; but I saw none but what had been kept where they *might* have frozen. I have known but one animal affected with the disease which was stabled, and that one lay next to a door under which there was an opening of several inches, where the cold air had free access to the hind feet, which are so much affected that they will all come off.

After the cold weather was nearly gone, about the first of April, I procured some ergot of spear grass, and after cleaning it as much as I could from other substance, I had a bushel of it, which one of my neighbors fed to a calf of his, which I have mentioned as having something of the disease in February and nearly recovered, to that calf he fed a quart a day, mixed with bran to induce the calf to eat it until the calf had eaten the whole of the bushel of ergot, and we have been able to discover any effect that it had on the calf; in its pulse, not which we examined often, or in its health in any respect.

From the above circumstances, and the fact that some cattle had the disease without eating ergot, I concluded that it was more probable that the disease was caused by something else; and that it is possible that ergot produced by spear grass is harmless, although that of rye is well known to be poisonous.

The effect of the disease, I believe, is in all respects the same as that of freezing; and as far as I have observed, the outside claws are more apt to be affected than the inside ones. I have never known an animal lose the inside claws and not the outside ones, but have known instances of their losing the outside claws and the inside ones remaining sound. The outside ones are undoubtedly the most exposed to the cold, and taking the above facts and circumstances together, I am of the opinion that the disease is caused wholly by frost; but the observation and experience of some other person may alter that opinion; I shall be quite willing to alter it whenever good cause is shown for doing so.

I cannot account for the disease being more prevalent last winter than the preceeding; the weather, I believe, was not quite as cold, but it may be possible that the sudden changes, together with the excessive rains of last winter, might have had some effect.

The disease, which I mentioned, with which cattle were affected the forepart of April, may possibly be something like chilblains on the feet of children, which are, I suppose, occasioned by cold, the effects of which may last when the cause is removed and it may be something else, but be the cause what it may, I have never known it to be very injurious.

If you think the above facts and opinions, or any part of them, are worth publishing, you are at liberty to do so, but I doubt whether they are.

HEMAN CHAPIN.

East Bloomfield, May 14, 1838.

Subsoil Ploughing.

[FROM THE GENESEE FARMER.]

The British Farm. Mag. thus describes the effects produced by the subsoil plough of Mr. Smith, near Sterling in Scotland.

"This machine is a necessary accompaniment to draining; but when that is done effectually, it seems calculated to render the most sterile and unproductive soil fertile and profitable. There is no difficulty more fatal to the farmer, than cultivating a thin shallow soil with a stiff retentive subsoil (or hard-pan.) Whatever pains may be taken with the former, however expensive the dressing which may be used in its cultivation, the nature of the subsoil will always counteract its beneficial effects. Many persons have endeavored by trenching to obviate this difficulty; but where the subsoil is of that steril nature, and requires exposure to the atmosphere for so long a period to render it productive, few farmers have been bold enough to repeat the experiment. Mr. Smith's ingenious invention, by breaking the subsoil, without bringing it to the surface, renders it pervious to both air and water. The same chemical changes, which take place in a fallow, owing to its exposure to wind and rain, are thus brought into operation in the subsoil; whilst the upper is in the ordinary course of cropping, and when, after a few years, by the greater depth of ploughing, the subsoil is gradually mixed with the upper, it is found to be so completely changed in its nature as to be capable of producing every species of grain. The experiment has been tried for twelve years, and with uniform success.

In a later communication, Sir E. Stracey, the inventor of the plough figured in our Monthly Farmer, says he invented his plough in the year 1833, and adds,—

"I have broken up nearly 500 acres of heath land with this plough; my crops have been nearly doubled; the wheat produced on land so broken up has been fine plump grain, weighing about 63½ lbs. to the bushel; and it has fetched the best price in the market, when before the deep ploughing the land scarcely produced the seed; the wheat was poor and shriveled; and as I had no manure to lay on the ground I can ascribe the goodness of the crop to nothing but the deep ploughing."

We think these testimonies in addition to those formerly given, are sufficient to entitle the subject of subsoil ploughing to the favorable consideration of farmers located on such soils. Mr. Smith's plough is what is called a foot plough, its depth being regulated in the manner of common ploughs, while Mr. Stracey's is a wheel plough and its depth is determined by the set of that. Any plough maker could manufacture this implement, and any farmer who understands what is required from its operation could give the necessary directions. Great strength is evidently required, but as the head and the parts that connect it with the beam, are entirely of iron, they can be easily adapted to the resistance to be overcome.

The advantage of "Swathing" Wheat, in Reaping instead of "Handing."

[FROM THE FARMERS' REGISTER.]

This year the luxuriant growth of my wheat induced me to think that it could not be saved by the long scythe and cradle, and handled by the binders, in the usual way, to advantage. I reduced my scythes and cradles to forty eight inches, and swathed my wheat. Being satisfied, from observation, that this method of saving my wheat is greatly to be preferred to the one I formerly pursued, I will state the manner in which the work was done; and if you or your readers should esteem this hobby-riding, I am quite willing you should indulge the laugh. I do not think, according to your definition, you can bring it within the class of humbugs. As I understand you, hobbies generally bring loss to the owners; humbugs are started by the jockeys for profit.

The stroke of the cradler brings him half round on the land, and, by raising the heel of the cradle, he lays the wheat across it; his hands both remain firm on the sneed, the weight of the wheat rests upon him, but for a moment. The motions being freer than when he gathers by the hand, he cuts faster, and with more ease to himself. My people disliked the change at first, but soon became accustomed to it. I had two or three lands cut before the rakers and binders started. Four rakers (the rakers collecting two lands) and seven binders kept without difficulty the distance at which they started, and would have overtaken the cradlers, if I had permitted, and sometimes, in my absence, did so. The task of rakers is easy; by a little care they collect all the wheat which is cut off, and by gathering it in bunches of a proper size, the binder has to make but one stoop for a sheaf, and there are no scattered heads to be collected by hand, which greatly lessens and lightens his labor. My crop was unusually heavy; but I never gathered wheat at so little loss. My usual practice has been to run a horse-rake after the binders; but so little was left this time, that I deemed it not worth the cost. The experience of the harvest has convinced me, that by this method, unless the wheat is much down, it can be better saved than by the sickle.

In New York and Pennsylvania, swathing is the usual method of gathering wheat; but I never before saw it in Maryland. If it be the common practice in Virginia, it would be useless to give this a place in the Register. To communicate to farmers what they know, is in as bad taste, as to tell to a company a good story which they had heard before. Among the complaints made by Sir John Fallstaff against Justice Shallow, one was, that he was ever on the rearward of the fashion, and sung old tunes which carmen whistled. I have no inclination to be numbered in the family of the Shallows, though the connexion is pretty numerous, and some of them wear fine linen, and sit in high places.

Mr. Hussey, the patentee, had his wheat cutter in this neighborhood during the harvest, which did its work perfectly. I saw the performance, and do not think it left one head in a thousand. The

only objection (which is a serious one) is, that it does not do enough. I understand that from fifteen to eighteen acres is as much as it can cut in a day; and you well know that a protracted harvest is often attended with serious loss.

RUSTICUS.

Eastern Shore, Md. July 28, 1838.

[The general practice in lower Virginia, is to catch the reaped wheat from the cradle in the left hand, and then to throw it, (two or more such handfuls together,) to be picked up by the binders. This usage could not have been commenced, except where the growth was light and thin; and nothing but the difficulty of changing the old practices of laborers, has prevented this mode being abandoned, on good lands, for that recommended by our correspondent.—Ed.]

How to form a judgement of the age of a Horse by his Teeth.

[FROM THE FARMER'S CABINET.]

At two years old, the horse sheds the two middle teeth of the under jaw. At three years old, he sheds two other teeth, one on each side of those he shed the year before. At four years old, he sheds the two remaining, or corner teeth. At five years old the two middle teeth are full, no longer hollow, as all others are, and the teeth have penetrated the gums. At six years old, the four middle teeth are full, the corner teeth only remaining hollow: the tusks are sharp, with the sides fluted. At seven years old, the corner teeth are full, the tusks longer and thicker, and the horse is said to be *aged*.

Note. It is not meant that exactly at the periods above mentioned these changes take place in the horse; much depends upon his constitution; whether he be a late or early foal; also upon the manner in which he has been reared, as to food and shelter, &c. The corner tooth, too, might remain a little hollow after the age of seven, but the appearance is still very unlike the mere shells, which they are, at the age of six.

Notice of a New Process for making Bricks, Tiles, &c. Invented by M. TERRASSON.

[FROM THE FRANKLIN INSTITUTE.]

After remarking upon the properties necessary in a machine that shall completely fulfil the objects of an artificial brick maker, the difficulties to be surmounted in such an invention, especially that which arises from the adhesion of the clay to the mould, and the failure, wholly, or in part, of all former contrivances for this purpose, the inventor thus describes his plan:

This machine is divided into two parts.

1. Machine for kneading the clay.
2. Machine for moulding and transporting the bricks to the area, or yard.

The same motive power may accomplish both objects.

Machine for kneading.—Horse or water power, &c., may be used

at pleasure. That which I use at Teil is moved by two horses. The yard is on the side of an argillaceous hill; Two large sheds are erected, one of which is two stories high; the upper serving for the horse floor, the large wheel, and the several connecting parts. The ground floor below contains the moulding and transporting machine.

The other shed is a drying room and store house; it is situated so as to serve as a place of discharge by the shortest way possible.

The hill forms a slightly inclined plane; it furnishes the earth, and from its position facilitates the transportation of the clay.

Machine for Kneading and drawing out the Clay.—Two horses attached to the two arms of a lever, turn a large wheel connected with a trundle, which impels a vertical shaft working in a cylinder or field vat. This shaft is furnished with spiral cutters;—the moistened earth is put into the vat, the cutters in turning, knead it, divide it, and force it, by its own weight and the impulsion of the screw, which operates like the screw of Archimedes, excepting that it reverses the motion. The clay arrives at the bottom of the vat exceedingly well prepared, and then passes through a hole, round or square, which may be enlarged at pleasure by means of a screw which presses against a slide. We thus obtain a roll or fillet of clay of any desired dimensions.

Machine for Moulding and Transporting the Bricks.—This machine, which gears into the one above, is placed below the vat in such a manner that the clay, already formed of a due calibre, enters the mould, which is nothing more than a chaplet or hollow frame, moving horizontally, with an adjusted velocity, and turning upon and around cylinders. A large cylinder is placed over the mould, and another below, forming a rolling press which flattens and compresses the clay.

After having passed with the mould under this large cylinder, the clay is perfectly level or even: a boy having previously placed boards in the mould, and upon these boards the bricks are made. The frame returns empty, the boards continue their horizontal course, bringing a fillet of clay well pressed and levelled; two wires, stretched by a weight, and placed on each side of the board, free the clay, and remove all the roughness which, in being stripped, the mould might have left on the fillet.

The boards continue their horizontal course, being urged forward by those which the child continues to place in the mould; they arrive at a point immediately under one end of a balance weight (bascule) formed of a frame, across which wires are stretched, and which, as the weight falls, cut off, in the twinkling of an eye, ten or twelve bricks. The machine stops an instant to give time for this important operation, which may be repeated five times in a minute. A clock bell gives notice when the stroke is given. When the bricks are cut off, and the balance weight rises, the chaplet continues its motion, and two boys take hold of the board.

By means of a long file of cylinders upon a slightly inclined plane, the boards are carried to any desired distance without labour, being hurried down like wagons on an inclined railroad.

I have stated that five strokes of the balance weight may be given per minute, making fifty bricks of large size. By dividing them, 100 of less size would be made;—indeed if the children could take them

off, 150 might be made, a result which, however incredible, is nevertheless true, as I have proved before the authorities of the country, who were quite incredulous before they saw it. I have even gained bets upon it.

I have hitherto employed only horse power, but there would be great advantage in using steam, wind, and especially water; the velocity of the shaft being more regular and rapid with a water fall, and with a greater force than two horses, the kneading and other operations would be better performed.

By a similar arrangement, tiles are made, earthen water pipes may be moulded, concave bricks for vaults, and in fact all sorts of bricks, refractory and others.—*Receuil Industriell.*

Manufacture of Salt for Dairy Purposes.

[From the London Mechanic's Magazine.]

The Dutch are remarkably particular as to the proper quantity and quality of their salt, of which there are three kinds manufactured. The small salt for butter, which is somewhat smaller than the common salt made in this country, is boiled, or evaporated in 24 hours. This kind is also used, as already mentioned, in mixing in some districts with the Kanter cheese. The second salt is evaporated by a slower process, in about three days. It is used in salting by outward application, the Edam, Gouda, and in some places, the Kanter, cheeses. This kind is beautifully formed in natural chrystals of about half an inch square. The third kind is larger sized; the crystals are nearly an inch square, and the evaporation process lasts four or five days. It is sometimes used for salting the cheeses by outward application, but principally for curing fish, beef, pork, &c. The Dutch pay great attention to the exact quantity of the particular kind of salt necessary, so that we never find the cheeses made in Holland salted to an intolerable degree, as we sometimes experience in this country. I (says Mr. Mitchell) endeavored to discover the mode of manufacture, and learned some particulars on this important subject, but there appeared to be some secret in the process, which the manufacturers were unwilling to disclose. One thing is certain, that the use of the Dutch salt is one of the causes of the sweet and delicious flavour of their butter, which, although always well flavored, hardly tastes of salt, or rather of that acrid quality which the poisonous bittern of the muriate and sulphate of magnesia, pervading our common salt, imparts to our butter; and this is very obvious in comparing the Dutch butter with the best salted butter of this country. When it is considered that the health and prosperity of the people are materially concerned in the use of this article in so many various ways, the propriety, or rather necessity, of improvement in its manufacture will be more evident, and it is rather remarkable that whilst chemistry has now advanced to such perfection, no change has taken place in the mode of making salt for several centuries. The late scientific Earl of Dundonale, the late Dr. Coventry, and the Rev. James Headrick, proposed important improvements in the mode of manufacturing this article, which, however, seem never to have been adopted.—*Times.*

PART III.

MISCELLANEOUS INTELLIGENCE.

Emasculation of Vine, or a method to produce Grapes without pips.—Some of your readers will possibly feel startled at the above designation, and many will disapprove of a term used in surgery to an operation on the vine, at variance with received opinions on the physiology of plants. But, to your more ingenious readers, the experiment will offer a new source of amusement, and perhaps may lead to useful investigation. In Portugal and other places I frequently met with orange and lemon trees which produced fruit divested of pips. Upon inquiring for the cause, no one was able to enlighten me, further than that the effect was accidental. And I make no doubt that mere accident, (such as the perforation of the plant, when young by a worm, or a blow from a spade or hoe, when first planted,) did produce the same effect on those trees which it would have produced upon the vine, if done purposely, and with a view of the same result.

For this ingenious operation on the vine I was indebted, some years ago, to a horticulturist of great eminence in Paris. It is as follows:—

When the sap is rising in March, make a deep incision in the heart of the bearing branch, from whence extract, with a grafting knife, about a quarter of an inch (1 centime, 5 lignes,) of the pith, (moelle,) close under the first bud (nœud,) at the stem, (souche.) The wound is then to be bound up with worsted, like a graft. This may be removed at the end of three weeks.

If the operation be performed with care, after some experience, the result will be the production of grapes without pips.—*Hort. Jour.*

New method of applying Sulphur to plants, in a liquid form.—The "Flowers," or the finely lævigated stone brimestone, are with great difficulty mixed with water; and yet it is sometimes highly desirable to throw a shower of sulphurated water over the entire foliage of a vine or peach tree. This object can be readily effected by the aid of a little gun tragacanth, (gum dragon, as it is vulgarly called.) Half an ounce of the *powdered* gum, which can be procured very cheaply of any druggist, may perhaps suffice for two or three years. To a table spoonful or two of flowers of sulphur, in a wedgewood mortar, add three or four grains (or a quantity that would scarcely cover one half of a four-penny piece,) of the tragacanth; rub them together, dropping in a very little water: work these materials with the pestil till an even pasty mass be produced; then add water, to bring the sulphur to the consistency of cream; and in this state it will unite with any quantity of water; or, in other words, the particles of the sulphur will become diffused throughout the whole bulk, and can then be taken up by a syringe. The sulphur it is true, will be deposited in time, but vegetation will bring it again to that state of diffusion in which the particles may be thrown on the plant; to which, also, they remain *fixed*, in situations wherein they may exert their utmost energy, whether that be a preventive or remedial.—*Ibid.*

New mode of cultivating Strawberries.—A paper was read before the London Horticultural Society, May 1st, 1838, on a new method of growing this delicious fruit. Many communications have been made on the subject. A great desideratum has been to keep the fruit clean, in order that it might be well flavored. The value of the fruit did not depend upon the size, as upon other qualities. The

ordinary mode of protection for this fruit harbored slugs, and, if the weather was wet, gave them a bad taste. If slates were placed round them they were kept clean, but the roots were rendered dry, and the same effect was produced by tiles and slates. The mode which the writer adopted was to set them in ridges about four feet six inches apart, and twenty-four inches apart, and from twelve to fifteen inches between the rows. Between and around these he placed pebles, the convex surface of which allowed the rain to run between and penetrate to the roots, whilst at the same time it did not evaporate: the surface was kept clean and there was no dust arising. The pebles also became warm and reflected the heat of ths sun, but they did not impede the growth of the runners. Some of Myratt's prospered well, as also Hautbois, although the stems are slender, and they generally fall to the ground, the pebles being a support to them.—*Ibid.*

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Leaping Extraordinary.—On Saturday, the 9th instant, a chestnut gelding (Dreadnought,) the property of Mr. William Long, of Marham, Norfolk, was taken from his stall and instantly mounted by a gentleman, whose sporting celebrity is well known in the neighborhood, for the purpose of deciding an argument between the friends of the above named gentleman, who thought it impossible for the horse to clear a brook on the farm of Mr. Long, knowing at the same time the horse had hunted last season with the stag-hounds of H. Villebois, Esq. of Marham House; but to their astonishment he actually cleared the five following leaps. In the first leap, over the brook, he cleared 30ft. 2in.; the second, over a stake-bound fence with the ditch from him, he cleared 26 ft. 11 in.; the third over a post and rail fence, the ditch from him, he cleared 25 ft. 10 in.; the fourth, clearing a ditch and thorn fence, 23 ft. 9 in., and the fifth, into the stack-yard of Mr. Long, with post and rail fence, 22 ft. 5 in.—*English paper.*

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Arabian horses.—One must see the stable of Damascus, or those of the emir Beschir, to have a correct idea of an Arabian horse. This superb and graceful animal loses his native and his picturesque figure when he is taken from his native and his accustomed habits, and brought to our cold climate, and the shade and solitude of our stables. He must be seen at the door of the tent of the Arab of the desert, his head between his legs, tossing his long black mane, and brushing his side, shining like copper or silver, with his long tail, whose extremity is always tinged with henna; he must be seen decked with brilliant housings, trimmed with gold and embroidered with pearls; his head covered with a net of blue or red silk woven with gold or silver, and edged with tinkling points which fall from his forehead over his nostrils, and with which he conceals, or show at each movement of his neck, his fiery, large, and intelligent eye-ball; he must be seen above all, in numbers of two or three hundred, some lying in the dust of the court, others fettered by iron rings and fastened to long cords which cross these courts, others free upon the sands and leaping with one bound over the rows of camels which stand in their path; some held by young black slaves, clothed in scarlet vests, the horses affectionately putting their heads upon the shoulders of these children; and some playing together as free and unconfined as the wild colts of a prairie, standing around, rubbing their heads together, or mutually licking each other's shining and silvery hair; all looking at us with an uneasy and curious scrutiny, on account of our European dress and strange language, but soon becoming familiar, and coming gently, holding out their necks for us to stroke. The restless expression of the physiognomy of these horses, are perfectly incredible till one has seen it for himself. All their feelings are expressed in their eyes and in the nervous movements of their mouths and nostrils, as distinctly and expressively as upon the countenance of a child.

When we approached them for the first time, they exhibited as much dislike and curiosity as a man would feel at the sight of an unexpected and disagreeable object. Our language especially astonished them, and their ears pricked up and bent backward or thrown forward, showed their surprise and uneasiness. I admired especially, several valuable mares, reserved for the emir himself. I offered by my interpreter 10,000 piastres for one of the handsomest; but an Arab would not sell, at any price, a mare of the best breed, I therefore was unsuccessful.—*Translated from De Lamartine for the Bos. At.*

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Method of cleaning Glass.—Reduce to very fine powder a piece of indigo, moisten a rag, apply it to the powder and smare the glass with it. Wipe it well with a dry cloth.

Very finely sifted ashes applied in the same manner by a rag dipt in brandy or spirits of wine will answer well; but spanish white ought to be rejected as it is apt to take off the polish of the glass.—*Jour. de Conn. Us. et Prat.*

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To dey Wool and Goat's Hair a delicate Blue.—M. Buisson, apothecary, has communicated to the Royal Society of Agriculture at Lyons a new and very simple process. The color is strong enough to resist water, the sun, and even soap, while that obtained by dye woods fades much more easily, and is very inferior in brightness in an artificial light.

To obtain this color as pure, fresh and deep as possible, the water of the bath while cold must be saturated with chrystallized verdigrease (acetate of copper,) then slightly acidulated with acetic or pyroligneous acid; dip the stuffs in the usual way, then wash and dry them.—*Jour. de Conn. Usuelles.*

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Mew process for cleaning cloth from greace; by M. MARTIN.—This process which is very easy, consists in washing the cloth in warm water to deprive it of paste or gum, then to impregnate it with a mixture of Fuller's earth, potash or other alkaline material, and thus prepared, to suspend it in a tight box or receiver and subject it to the action of a get or steam. When withdrawn, it is thrown into the water and passed between two cylinders to clean it.

The cloth, in this process, receives no fulling, and by means of a small boiler, which costs but little, a large amount of work can be rapidly performed.—*Bull d'encour, Decem.*

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To prevent Dogs sucking eggs.—It sometimes happens that the *sometimes useful, and sometimes useless* animal called a dog, finds out eggs are very good eating, and takes the liberty to "lay his jaws" to every one that he meets with, taking, also, like some other servants, with not quite so many legs, the meet to himself, and leaving the shell to his master.

A friend of ours once had a "Bose," which he was very fond of, and which was in most respects, a very sedate, worthy sort of a dog, but he had the trick of sucking every egg he could find.

Having heard that a dose or two of tartar emetic would make him sick of that business, he accordingly tapped one end of an egg, put in a lot of the tartar emetic, and laid it down in his dogship's path, who forthwith helped himself to its contents, without ceremony. He was then kept without water, and occasionally, from time to time, supplied with a *medicated* egg, till Bose began to find that the very sight of them was a signal of a fit of sickness, and wisely resolved to quit the business, which resolve he kept, as a good and faithful dog should. If you have a "good for nothing dog," and he sucks eggs, shoot him. If you have a good dog and he sucks eggs—*doctor* him.—*Maine Farmer.*

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Test of Good Flour.—Mr. John Babcock, of London, gives the following rule to ascertain the quality of flour:

"Flour which is pure and unadulterated, may be known by your siezing a handful briskly, and squeezing it half a minute; it preserves the form of the hand in one piece, although placed rudely on the table. Not so with that which contains foreign substances; its adhesive property is weak, and falls to pieces immediately. The whiteness of flour is no evidence of its goodness; the different materials used in adulterating flour, have a tendency to whiten it."

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To separate Oats from Wheat.—A farmer observes that he can mix wheat and oats together, in equal quantitits, or otherwise, and completely separate them in a few minutes, the following manner: Make a pickle by dissolving salt in water strong enough to float a potato, then put in the grain, and the oats and light kernels of wheat will sink. Soaking the wheat in pickle is a good preparation to prevent smut.—*Yankee (Me.) Farmer.*

COSTIANA CALENDAR,

For the Cultivation of Grape Vines.

JANUARY.—Plough and manure the earth near the root of the Vines, pluck out all the grass; repair the vine arbours, which should be 6 feet high from the ground; graft the new Grape Vines, the Bullace Vines, and the wild Grape Vines, as short as possible; leave every thing snug for the next month; supply your manure reservoir, with every thing capable of decay, with lime, dry old bones, &c and read what follows: The months of July and August, are the proper months for the grapes to get well ripe: in the meanwhile, begin to clear your soil so that to leave on it only your vines, as clear as possible, in a distance of twelve feet square, one root from the other; besides this you ought to plough the earth ten inches deep, by the side of the root of the vines, then fill it up with manure, and cover it with light earth: See if you can finish this preparatory operation by the end of February next.

FEBRUARY.—After the usual storm of Epiphany, you will have bad weather, but as soon as it becomes milder, in the first days of February, supply your Vine's nursery with new cuttings, to be taken between the young and the old part of the vinecep: set them in a prepared place of light earth, one half foot distant each. Do every thing systematically; divide your work, and you will save time. In the "Columbia Telescope" of Dec. 1st, I have brought to your notice the best Vines to be naturalized in your soil; besides, all Grapes of hard, thick skin, and of large size, are preferable here, to any others. In the branches of your Vine, leave only the best trunk untouched, to be trimmed in the next month, as I have directed above. Repair all your fences, and for the month of February you have no other things to do.

MARCH.—Trim your Vines as short as possible, that is, of course, close to the last shoot of the vine eye. It is better to trim a vine so that you may gather few but good, neat, ripened, unrotten bunches of Grapes, rather than to gather rotten grapes in abundance.

What I advise you to do, is not an experiment; it is the proof of my own experience—my own art brought to a science.

APRIL.—Pass every thing in review, inspect if every thing is right; if your working men have executed my injunction, look to the fences and the vine arbours, for the vernal equinox must have caused them some damage. In order to be safe from the hard gales, tie to the arbours, all young shoots, of the vines, and hoe a light earth over and close to the root of each vine; by that time your Grapes will be in flower, should the season have gone regular.

MAY.—Now, I expect that your Grapes are in the size of small bird's shot; if so, very well. Take a stick, and beat slightly, all the vine branches, so that the bunches of Grapes may be left cleaned and proper; break the young points of all branches of vine, at a distance of one half foot of the last bunch of Grapes.

JUNE, JULY, and AUGUST.—Expose, not at once, but by degrees, the yet unripened bunches of Grapes to the air and to the sun, taking out progressively, two thirds of the leaves of the vines. Those leaves are the best food to feed daily your Cattle and Poultry. Be careful to water the roots of your vines during the warm months, when the weather is dry.

In the vintage I shall be with you again.

CORREA DA COSTA.